

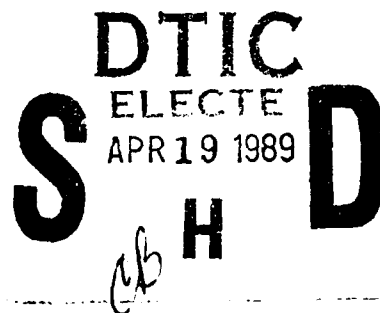
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# Spatial Target Location Errors Derived from Measurements Collected from Sixteen Satellite Constellations

Michael A. Crombie

March 1989



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## PREFACE

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The study was conducted during the autumn of 1987 under the supervision of Donald R. Barnes, Chief, Space Concepts Division; and Dr. Joseph J. Del Vecchio, Director, Space Programs Laboratory.

Col. David F. Maune, EN, was Commander and Director, and Walter E. Boge was Technical Director of the U.S. Army Engineer Topographic Laboratories during the report preparation.

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# **SPATIAL TARGET LOCATION ERRORS DERIVED FROM MEASUREMENTS COLLECTED FROM SIXTEEN SATELLITE CONSTELLATIONS**

## **INTRODUCTION**

Tabular results of spherical errors in computed target positions derived from a hypothetical target tracking system<sup>1</sup> are extended to include sample probabilities of minimum PDOP (Position Dilution of Precision) values and shortest distances to targets associated with target trackers referenced to 16 constellations of satellite platforms. The target in this case is located at specific heights and latitudes of an intercontinental ballistic missile launched over the North Pole. A ballistic missile trajectory was chosen merely to provide a set of spatial target points that had a counterpart in the real world. A similar study is underway to determine ground location errors of fixed and moving targets. The target region in that work will be constrained to a Corps-sized region and the target tracker platforms will include satellites of shorter periods than those considered in this work. Results given in the referenced work pertain to symmetric target-target tracker models where each target tracker is equidistant from the target and adjacent target trackers are equidistant from one another. More general target-target tracker configurations are examined here by constraining the target trackers to any one of the 16 constellations and by constraining the target to a ballistic trajectory.

Data derived in this experiment can be used in a comparative analysis of target position errors derived by a single target tracker and errors derived from 3, 4, or 5 slant range only observations. The single target tracker is the hypothetical target tracker system described in the referenced work and is comprised of a range-to-target measuring capability, a real-time attitude and position capability and an automatic target sensor. Since target position errors in this case are greatly dependent on distance to target, the comparative analysis considers only those platforms of the several platforms having line-of-sight (LOS) with the target that are closest to the target. Target position errors calculated from slant range observations are independent of distance to target, but are heavily dependent on the geometric arrangement of the  $N \geq 3$  platforms having LOS with the target. The best geometric arrangement is defined by minimum PDOP, which is the square root of the trace of the estimated position covariance matrix.

The purpose of this report is to apply and extend the results given in the referenced report to a more realistic situation not involving ideal geometric models. Another study will extend the results to positional errors of moving and stationary ground targets observed from lower orbits as well as from the 16 constellations described in this work.

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<sup>1</sup> Crombie, M., "Target Location Errors Derived From a Hypothetical Target Tracking System." U.S. Army Engineer Topographic Laboratories, Fort Belvoir, Virginia 22060-5546. Report ETL-0631, February 1989.

## NUMERICAL EXPERIMENT

All of the computer runs were performed on the Zenith 248-PC desktop computer. Specific orbit configurations were defined and then used to describe target-tracker positions at given times. The three shortest distances to the target and the set of 3, 4, or 5 platform positions producing the best PDOP values were determined at a given time. Time was incremented by one minute and the process repeated. In this way, histograms of shortest distances to target and least PDOP values were developed. Sample probability distribution functions were calculated from the histograms. Should the problem be turned around and the objective be to determine the best constellation that met geometric and cost restraints, then a micro computer approach would be entirely unsatisfactory. The results of this work pertain only to the 16 constellations defined below. Although the target was regarded as an intercontinental ballistic missile in this work, any target located at the given positions is applicable.

**Constellation Definition.** Each of the 16 constellations have the following elements in common:

1. Three satellites per orbital plane.
2. Equal spacing of satellites in the orbital plane.
3. Circular orbits.

In general, there are four kinds of constellations concerning the number of satellites per constellation. The four kinds are defined below in table 1:

**Table 1. Constellation Definition**

Const.	No. of Planes	No. of Satellites	Longitude of Ascending Node					
1	3	9	0°	120°	240°			
2	4	12	0°	90°	180°	270°		
3	5	15	0°	72°	144°	216°	288°	
4	6	18	0°	60°	120°	180°	240°	300°

Associated with each of the four kinds are two periods, namely 6-hour periods and 3-hour periods. Finally, associated with each of the eight kinds of definitions are two inclinations, namely 60° inclination and 90° inclination. Satellite positions were calculated in an earth-fixed coordinate reference system. Each experiment was started at time equal 0 and allowed to run for at least one period in increments of one minute.



**Ballistic Trajectory.** The two minimum energy ICBM trajectories described in figure 1 are examples of 9000 kilometer lofted and depressed trajectories.<sup>2</sup> The lofted trajectory is in flight for about 42 minutes and impacts the ground at a 40° angle. The depressed trajectory is in flight for about 24 minutes and impacts the ground at a 15° angle. The maximum altitude of the lofted trajectory is about 2750 kilometers.

**Valid Observations.** Before a particular target tracker can be regarded as a possible candidate for inclusion in the probability calculations, there must be a clear LOS between it and the target. For targets above 500 km, LOS was defined such that the ray between target and target tracker was above the upper reaches of the ionosphere (400 km). In this way, unpredictable errors in round trip times caused by the ionosphere can be ignored. For ground targets, LOS was defined such that the angle of the ray between target and target tracker was more than 5 degrees above the earth target plane at the target so as to avoid ground clutter.

**Least Distance and PDOP.** Suppose there are M valid observations on the target at time t. The M slant range distances between the target and target trackers are calculated, and the three shortest distances are determined by a sorting algorithm. Determination of the three minimum PDOP values is more difficult. PDOP is defined to be the square root of the trace of the sample position covariance matrix derived by least squares adjustment. If  $d_i$  is the column vector of direction cosines between the target and the  $i^{\text{th}}$  target tracker, then

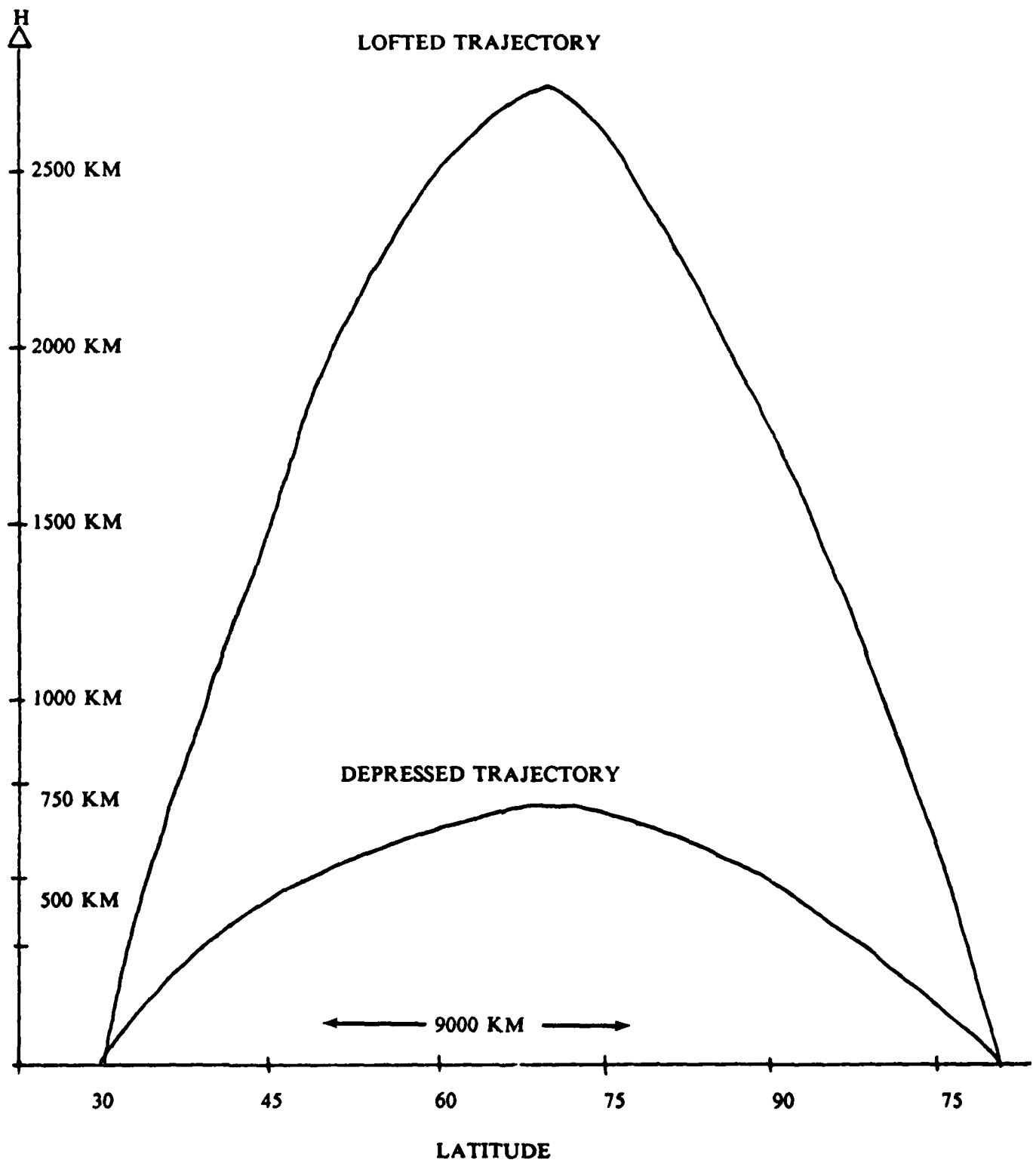
$$\text{PDOP}^2 = \text{Trace} \left( \sum_{i=1}^N d_i \cdot d_i^T \right)^{-1}$$

If there are M valid observations, then  $C_{M,N}$  sets of N observations must be tested to determine the minimum PDOP. For example, if at a specific time t,  $M = 10$  then  $(C_{10,3} + C_{10,4} + C_{10,5}) = 582$  sample covariances must be formed to determine the three minimum traces for  $N=3, 4$ , and 5 observations.

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<sup>2</sup> David Pines, Editor - "Soviet Ballistic Missile Threat: Current and Responsive," Chapter 2. Review of Modern Physics, Volume 59, Number 3, Part II, July 1987.

Figure 1. Ballistic Missile Trajectories.



## SAMPLE PROBABILITIES

Three tables of PDOP-bins were defined, beginning at 1.0 and extending to 20.4 in increments of 0.2. The first bin pertains to PDOP values less than 1.0, and the last bin pertains to PDOP values greater than 20.4. There is a total of 99 bins for each of the three observational types. As PDOP values were computed, counts were built up in the appropriate bins. Relative frequencies were then computed for each bin and from the relative frequencies cumulative probabilities were generated.

Expected values were computed from the sample probability data. The expected value of a particular PDOP is

$$E(\text{PDOP}) = p_1 * 0.5 + \sum_{i=1}^{97} p_{i+1} * (0.9 + 0.2 * i)$$

Note that the last bin is not included in the calculation.  $P_i$  is the relative frequency associated with the  $i^{\text{th}}$  bin. The expected value of  $\text{PDOP}^2$  is

$$E(\text{PDOP}^2) = p_1 * 0.25 + \sum_{i=1}^{97} p_{i+1} * (0.9 + 0.2 * i)^2$$

The variance associated with a specific PDOP is

$$\sigma^2 \text{ PDOP} = E(\text{PDOP}^2) - E^2(\text{PDOP})$$

Cumulative probability distribution tables were generated for the three shortest distances in the same way as in the PDOP calculations. In this case, the bins were defined beginning at 0.5 and extending to 21.5 in increments of 0.5. The last of the 44 bins pertained to distance values greater than 21.5. The distance values are  $10^6$  times the true distance in meters. Expected values of distance were computed in a manner similar to the PDOP values.

## NUMERICAL RESULTS

**Probability Distributions.** Two sets of cumulative distributions were generated, and reduced versions of those distributions are presented in appendixes A and B. In both sets, three values appear in the title. The first value is the latitude of the target; the longitude for all targets was  $100^\circ$ . The second value is the inclination of the orbital plane and the last value is the satellite period. A 6-hour period translates into a semimajor axis of 16763428.6 meters. A 3-hour period translates into a semimajor axis of 10560298.3 meters. The tables in both appendixes are organized by target elevation. Note that the tables pertaining to latitude  $30^\circ$  extend only to a target elevation of 1000 km and to 2000 km for a latitude of  $45^\circ$ . The ballistic trajectories are below these heights for all practical launch sites. Finally, tables in both appendixes are organized by numbers of satellites. The values under CONST=1, 2, 3, or 4 pertain to 9, 12, 15, or 18 satellites, respectively.

The tabular entries in appendix A pertain to minimum PDOP values. In all cases, the PDOP argument goes from PDOP=2 to PDOP=10. The cumulative probability values are organized by number of observations. For example, consider table A-1. If the target is at latitude  $30^\circ$  and elevation 500 km, then 95 percent of expected minimum PDOP values are less than 3.0 when three observations are made from 18 satellites (CONST=4) orbiting at  $60^\circ$  inclinations and in 6-hour periods. If four observations are made, then 96.7 percent of the expected PDOP values are less than 3.0, and 97.5 percent when five observations are made.

The tabular entries in appendix B pertain to the expected value of the shortest distances to the target. The distance arguments (DIST) vary from table to table. The lowest value of the argument was chosen to match that value in the larger set that had a probability of occurring. The headings, FIRST, SECOND, and THIRD pertain to the shortest, next shortest, and third shortest distance respectively.

**Expected Values.** Two sets of expected values were generated and are presented in appendixes C and D. The values in the titles are exactly like those described above, and the results are organized by target elevation exactly as before.

The tabular entries in appendix C are expected values of minimum PDOP, standard deviations of the expected values, and probabilities that the relevant event occurred. For example, consider table C-1, which pertains to a target at latitude  $30^\circ$ , observed by satellites in  $60^\circ$  orbital planes and orbiting in 6-hour periods. Suppose the target was at 500 km elevation and there were 12 satellites (CONST=2) in the constellation, then if 4 target trackers were used to compute target position, the expected minimum PDOP would be 2.03. The standard deviation associated with this value is 0.45, which says that minimum PDOP's would not vary greatly over time. However, the event probability is 0.73, which says that four valid observations could not be made 27 percent of the time.

The tabular entries in appendix D are expected values of shortest distances, associated standard deviations, and event probabilities. Consider table D-4, which pertains to a target at latitude  $30^\circ$ , observed by satellites in  $90^\circ$  orbital planes and orbiting in 3-hour periods. Suppose the target was at ground level, and there were nine satellites (CONST=1) in the constellation. Then, the expected value of the shortest distance to the target would be 5840 km with a standard deviation 1040 km. The event probability is 0.78, which says that the target would not be in LOS with any of the satellites 22 percent of the time. Note that if the automatic target sensor operated in the visible range, then the event probability would be lower because the target would be in darkness part of the time. The expected value of the second shortest distance is 7020 km with a standard deviation

610 km. The event probability here is 0.43, which says that the target would not be in LOS with a pair of satellites simultaneously 57 percent of the time. The same comment pertains here if the target sensors operated in the visible range. The event probability associated with the third shortest distance is zero which means that the target would never be in LOS with three satellites simultaneously. This says that target coordinates computed from 3, 4, or 5 slant range only observations is impossible. This result is restated in the first line of results in table C-4.

## DISCUSSION

The extension of the previous work<sup>3</sup> to include target trackers in orbit was performed for two reasons. The first reason is that the overall work effort is in support of an ETL-initiated, USACE-approved NASA shuttle experiment intended to validate the concept of precision real-time attitude keyed to a digital image stellar camera operating in space. The second reason is that orbiting platforms provide a more realistic configuration of target tracker positions than the ideal geometric configurations described in the referenced work.

The selection of a family of intercontinental ballistic missiles as targets was used mainly to develop positions in space that relate to realistic targets. The situation is not entirely realistic since the target longitude was kept at 100° for all cases. One reason for this simplification was to reduce the amount of compute time and another was that the expected values of PDOP and distance over time are mainly functions of latitude and elevation, not longitude.

A combination of the tables given in the referenced work and those presented in this work can be used in a variety of comparative analyses. For example, suppose there was a requirement to evaluate the performance, in the first case, of a single target tracker and, in the second case, of three slant range only target trackers operating in any one of the 16 satellite configurations. Suppose targets are at 60° latitude and located at 0 km, 500 km, and 2000 km elevation. In both cases, assume that the target tracker position errors are negligible. In the first case, let the system attitude error be either 0.5 seconds or 2.0 seconds, and let the slant range error be 10 meters. Finally, assume that the target error is 1.0 second, 3.0 seconds, or 5.0 seconds. The SP(99%) errors presented in table 2 were taken from table H-1 of the referenced work. Note that the errors were taken from the group where  $\sigma_{GPS}=1.0$  meter, which is regarded here as a negligible error.

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<sup>3</sup> Crombie, M., "Target Location Errors Derived From A Hypothetical Target Tracking System." U.S. Army Engineer Topographic Laboratories, Fort Belvoir, Virginia 22060-5546. Report ETL-0531, February 1989.

**Table 2. SP(99%) Errors Derived From One Case III Target Tracker**

$\sigma_a$      = 0.5 Seconds  
 $\sigma_R$      = 10 Meters  
 $\sigma_{Ops}$    = 1.0 Meters

DIST (km)	$\sigma_T$		
	1.0	3.0	5.0
500	21	28	39
1000	25	45	70
5000	81	205	336
10000	158	409	672

$\sigma_a$      = 2.0 Seconds  
 $\sigma_R$      = 10 Meters  
 $\sigma_{Ops}$    = 1.0 Meters

DIST (km)	$\sigma_T$		
	1.0	3.0	5.0
500	27	33	42
1000	40	55	77
5000	178	259	372
10000	353	517	743

The expected shortest distances given in table 3 are taken from tables D-9, D-10, D-11, and D-12 of this work. A quick glance at the results in table 3 show that the expected distances are almost double for 6-hour periods compared to 3-hour periods. This result is not unexpected since the 3-hour period satellites are much closer to the three targets than are the 6-hour period targets. An equally obvious observation is that the expected distances decrease as the target elevation increases. With respect to orbit inclination, there does not appear to be much difference between  $i=60^\circ$  and  $i=90^\circ$ , whereas there is an appreciable decrease in expected shortest distance to target as the number of satellites increases. In any case, from a pure numbers point of view the best selection would be an 18-satellite configuration orbiting in  $90^\circ$  planes in 3-hour periods. The expected SP(99%) error can be estimated by interpolating in table 2. For example, suppose, for reasons other than purely geometric ones, that the 15-satellite configuration was selected and, suppose too, that the primary target of interest was on the ground. From table 3 the expected minimum distance to target is 5040 km. Then, from table 2 (where the target error is 1.0 second) the corresponding SP(99%) is 81 meters or 178 meters depending on whether the attitude error of the target tracking system was 0.5 second or 2.0 seconds.



**Table 3. Expected Values of Shortest Distances to Target**

$\phi = 60^\circ$   
 $H = 0 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	5380	5320	11330	11230
12	5200	5150	11110	11080
15	5050	5040	11010	11000
18	4980	4940	10930	10930

$\phi = 60^\circ$   
 $H = 500 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	5100	5050	10930	10820
12	4890	4820	10700	10670
15	4710	4710	10580	10580
18	4630	4600	10500	10490

$\phi = 60^\circ$   
 $H = 2000 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	4380	4320	9850	9670
12	4070	4000	9530	9470
15	3810	3830	9380	9330
18	3700	3660	9260	9220

In the second case, where observations on the target are collected from three slant range only target trackers, the measuring errors are  $\sigma_R=10$  meters,  $\sigma_R=15$  meters or  $\sigma_R=20$  meters. The expected minimum PDOP values given in table 4 were taken from tables C-9, C-10, C-11 and C-12 of this work. A comparison of the results in table 4 show that the expected minimum PDOP values are smaller for 6-hour periods ( $H=0$  km and  $H=500$  km) and smaller for 3-hour periods when  $H=2000$  km. In all cases, minimum PDOP values are smaller for satellites in  $60^\circ$  inclined planes. Expected minimum PDOP values can be converted into SP(99%) errors by interpolating in table 5. Values in table 5 were calculated from the following formula:

$$SP(99\%) = 3 \cdot 368 \cdot \frac{PDOP}{\sqrt{3}} \cdot \sigma_R$$

A direct comparison with the numerical example given above can be made by estimating the ground target error when a 15-satellite configuration orbiting in 90 planes in 3-hour periods is used. In this case, the expected minimum PDOP from table 4 is found to be 3.6. From table 5, this value translates into SP(99%)=70 meters, 104 meters, and 139 meters, depending on whether  $\sigma_R=10$  meters, 15 meters, or 20 meters. A direct comparison with expected errors in the first case [SP(99%)=81 meters to 178 meters] can be made by noting SP(99%)=70 meters when  $\sigma=10$  meters in this case.

The results of this work can only be used to evaluate one or more aspects of a proposed target tracking system. System and environmental distortions were not considered, nor were system costs, or the complex communication and control problems when two or more target trackers are used. Even the one number comparison used in the example above requires deeper investigation than developed so far.

For example from table C-12 the standard deviation associated with the expected value of minimum PDOP=3.60 is almost as large as the value itself ( $\sigma_{PDOP}=2.84$ ). Furthermore, from the same table the event probability is 0.92, which says the system cannot observe the target 8 percent of the time. Proponents of the complete target tracking system might point out (see table D-12) that the expected value of the shortest distance (5040 km) has a standard deviation of 570 km with an event probability of 1.0. In fact, if two such target trackers are used, then the expected value of the second shortest distance is 5930 km with a standard deviation of 670 km. Again, the event probability is 1.0.

**Table 4. Expected Values of Minimum PDOP from Three Observations**

$\phi = 60^\circ$   
 $H = 0 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	----	3.91	2.83	3.47
12	3.63	3.99	2.56	4.05
15	2.97	3.60	2.75	3.58
18	3.62	3.62	2.65	3.20

$\phi = 60^\circ$   
 $H = 500 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	3.25	3.78	2.63	3.08
12	2.81	3.65	2.54	3.53
15	3.08	3.31	2.50	3.30
18	2.68	3.75	2.38	2.97

$\phi = 60^\circ$   
 $H = 2000 \text{ km}$

No. of Satellites	P = 3 hours		P = 6 hours	
	i = 60°	i = 90°	i = 60°	i = 90°
9	2.19	2.92	2.84	3.23
12	2.00	2.77	2.66	3.34
15	1.99	2.60	2.85	2.83
18	1.91	2.55	2.63	2.82

**Table 5. SP(99%) Position Errors**

<b>Slant Range Error</b>			
<b>PDOP</b>	<b><math>\sigma_R = 10</math></b>	<b><math>\sigma_R = 15</math></b>	<b><math>\sigma_R = 20</math></b>
1.00	19	29	40
1.50	29	43	59
2.00	40	59	78
2.50	48	73	97
3.00	59	88	116
3.50	68	102	137
4.00	78	116	155
4.50	88	132	175
5.00	97	145	194

Results from this work can be used, within the parametric bounds of the observation mode and target tracker models, to evaluate proposed target tracker configurations. Many conditions must be met in any target tracker configuration development. For example, a requirement might exist for organizing the satellite platforms so that there are no missing regions in observation space. The tables in this work can be used to identify missing regions by noting where the event probabilities are less than 1.0. Another analyst may be less concerned with single points measured at discrete times and more concerned with a continuous "look" at the target over a given amount of time, where in that time span minimum PDOP does not exceed a given value or perhaps the shortest distances to the target remain under a given value. Determining which platforms provide minimum PDOP is not an easy problem. Maintaining minimum PDOP over time where the target and target trackers are in motion will be equally difficult. Determining minimum PDOP on the fly is a problem being addressed in the GPS community.

## **CONCLUSIONS**

1. Tables were developed that will allow analysts to predict target location accuracies from observations collected from a variety of satellite platforms.
2. More efficient methods must be developed for determining minimum PDOP.

## APPENDIX A.

### Cumulative Probability Tables of Minimum PDOP Values

Tabular entries are cumulative probability values of minimum PDOP. The values in parentheses in each of the titles define the latitude of the target, the inclination of the orbital plane, and the satellite period. The data is organized by target elevation, by number of observations, and by constellation number. The number of observations pertains to the number of instantaneous slant range measurements made on the target. CONST=1, 2, 3, or 4 corresponds to 9, 12, 15, or 18 satellites.

TABLE A-1 (30 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.441	.269	.404	.000	.509	.573	.713	.000	.000	.594	.744
3	.404	.806	.806	.883	.000	.839	.823	.908	.000	.000	1.000	.878
4	.623	.887	.856	.967	.000	1.000	.873	1.000	.000	.000	1.000	1.000
5	.712	.913	.887	1.000	.000	1.000	.890	1.000	.000	.000	1.000	1.000
6	.750	.925	.911	1.000	.000	1.000	.910	1.000	.000	.000	1.000	1.000
7	.773	.934	.926	1.000	.000	1.000	.930	1.000	.000	.000	1.000	1.000
8	.804	.943	.935	1.000	.000	1.000	.930	1.000	.000	.000	1.000	1.000
9	.827	.943	.944	1.000	.000	1.000	.950	1.000	.000	.000	1.000	1.000
10	.846	.949	.951	1.000	.000	1.000	.950	1.000	.000	.000	1.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.464	.463	.450	.000	.597	.724	.808	.000	.862	.915	.863
3	.324	.921	.900	.950	.355	.949	.929	.967	.000	1.000	1.000	.975
4	.598	.968	.932	.992	.717	.998	.946	1.000	.000	1.000	1.000	1.000
5	.663	.986	.944	1.000	.822	1.000	.957	1.000	1.000	1.000	1.000	1.000
6	.756	.989	.957	1.000	1.000	1.000	.962	1.000	1.000	1.000	1.000	1.000
7	.801	.992	.962	1.000	1.000	1.000	.971	1.000	1.000	1.000	1.000	1.000
8	.803	.992	.968	1.000	1.000	1.000	.974	1.000	1.000	1.000	1.000	1.000
9	.805	.994	.974	1.000	1.000	1.000	.979	1.000	1.000	1.000	1.000	1.000
10	.805	.994	.976	1.000	1.000	1.000	.979	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.057	.496	.519	.471	.163	.667	.832	.838	.408	.916	.910	.913
3	.426	.961	.968	1.000	.486	.963	.976	1.000	.508	1.000	1.000	1.000
4	.647	.992	.976	1.000	.724	1.000	.982	1.000	.638	1.000	1.000	1.000
5	.711	1.000	.982	1.000	.794	1.000	.987	1.000	.746	1.000	1.000	1.000
6	.785	1.000	.985	1.000	.905	1.000	.987	1.000	.915	1.000	1.000	1.000
7	.857	1.000	.987	1.000	1.000	1.000	.990	1.000	1.000	1.000	1.000	1.000
8	.886	1.000	.990	1.000	1.000	1.000	.990	1.000	1.000	1.000	1.000	1.000
9	.899	1.000	.990	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000
10	.903	1.000	.993	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.125	.550	.575	.660	.245	.778	.888	.872	.357	.921	.912	.917
3	.532	.961	.990	1.000	.623	.965	.990	1.000	.527	1.000	1.000	1.000
4	.731	.994	.990	1.000	.791	1.000	.990	1.000	.643	1.000	1.000	1.000
5	.796	1.000	.990	1.000	.853	1.000	.990	1.000	.746	1.000	1.000	1.000
6	.857	1.000	.990	1.000	.909	1.000	.990	1.000	.846	1.000	1.000	1.000
7	.919	1.000	.990	1.000	.973	1.000	.992	1.000	.966	1.000	1.000	1.000
8	.968	1.000	.992	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000
9	.968	1.000	.992	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000
10	.974	1.000	.993	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000



TABLE A-2 (30 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.347	.000	.267	.444	.000	.237	.438	.508	.000	.000	.597	.690
3	.577	.294	.631	.717	.000	.430	.625	.750	.000	.000	.758	.857
4	.689	.512	.753	.803	.000	.541	.734	.811	.000	.000	.758	.872
5	.740	.621	.797	.833	.000	.593	.772	.850	.000	.000	.766	.872
6	.786	.682	.822	.861	.000	.644	.809	.867	.000	.000	.782	.872
7	.811	.724	.858	.878	.000	.681	.831	.883	.000	.000	.790	.880
8	.837	.755	.875	.889	.000	.696	.861	.906	.000	.000	.806	.903
9	.852	.773	.894	.906	.000	.741	.876	.908	.000	.000	.831	.907
10	.852	.803	.900	.908	.000	.756	.903	.922	.000	.000	.839	.911

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.262	.047	.386	.497	.073	.275	.525	.608	.041	.225	.578	.650
3	.526	.497	.781	.814	.299	.586	.797	.842	.265	.437	.814	.853
4	.655	.650	.842	.864	.496	.708	.864	.875	.449	.603	.883	.881
5	.727	.733	.906	.881	.584	.775	.925	.892	.612	.689	.939	.903
6	.774	.783	.944	.903	.657	.822	.961	.914	.714	.762	.983	.925
7	.816	.814	.978	.914	.715	.850	1.000	.931	.776	.781	1.000	.942
8	.841	.836	1.000	.925	.752	.878	1.000	.942	.816	.821	1.000	.942
9	.861	.856	1.000	.942	.796	.883	1.000	.947	.878	.848	1.000	.958
10	.875	.881	1.000	.942	.825	.900	1.000	.958	.918	.861	1.000	.958

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.336	.233	.390	.497	.359	.403	.631	.639	.197	.505	.661	.675
3	.644	.561	.825	.917	.591	.647	.839	.936	.451	.703	.853	.942
4	.772	.686	.922	.947	.751	.744	.928	.956	.730	.792	.933	.958
5	.864	.756	.950	.958	.835	.797	.944	.964	.770	.837	.953	.969
6	.897	.811	.961	.967	.886	.844	.967	.975	.828	.883	.967	.975
7	.919	.847	.972	.972	.911	.875	.975	.975	.861	.908	.981	.978
8	.939	.869	.986	.975	.937	.892	1.000	.981	.910	.929	1.000	.986
9	.950	.892	1.000	.981	.958	.914	1.000	.992	.926	.933	1.000	.992
10	.964	.908	1.000	.986	.962	.925	1.000	.992	.934	.954	1.000	.992

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.328	.286	.394	.517	.437	.458	.672	.700	.290	.581	.735	.761
3	.733	.617	.844	.919	.706	.703	.867	.936	.627	.752	.877	.942
4	.861	.747	.947	.947	.896	.808	.964	.953	.852	.842	.967	.958
5	.942	.828	.969	.958	.932	.867	.975	.964	.888	.891	.978	.969
6	.953	.875	.975	.964	.946	.900	.981	.972	.911	.916	.983	.975
7	.961	.906	.981	.969	.953	.922	.986	.975	.923	.941	.989	.981
8	.967	.922	.986	.975	.961	.939	.989	.981	.935	.953	.992	.981
9	.969	.936	.989	.981	.961	.953	.992	.981	.941	.969	.997	.986
10	.975	.944	.994	.981	.968	.958	1.000	.986	.947	.975	1.000	.986

TABLE A-3 (30 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.186	.000	.406	.000	.000	.060	.531	.000	.000	.000	.000
3	.000	.722	.549	.768	.000	.000	.640	.823	.000	.000	.000	.000
4	.000	.835	.817	.906	.000	.000	.780	.896	.000	.000	.000	.000
5	.000	.887	.872	.924	.000	.000	.780	.927	.000	.000	.000	.000
6	.000	.897	.927	.964	.000	.000	.880	.979	.000	.000	.000	.000
7	.000	.918	.933	.971	.000	.000	.880	1.000	.000	.000	.000	.000
8	.000	.938	.945	.971	.000	.000	.880	1.000	.000	.000	.000	.000
9	.000	.938	.951	.978	.000	.000	.880	1.000	.000	.000	.000	.000
10	.000	.938	.963	.978	.000	.000	.920	1.000	.000	.000	.000	.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.046	.023	.286	.000	.000	.120	.395	.000	.000	.000	.578
3	.000	.500	.466	.650	.000	.696	.627	.762	.000	.000	.000	.867
4	.000	.666	.686	.872	.000	.957	.765	.910	.000	.000	.000	1.000
5	.270	.755	.797	.889	.000	1.000	.843	.940	.000	.000	.000	1.000
6	.405	.815	.870	.919	.000	1.000	.876	.961	.000	.000	.000	1.000
7	.486	.861	.904	.931	.000	1.000	.899	.973	.000	.000	.000	1.000
8	.595	.871	.938	.944	.000	1.000	.940	.994	.000	.000	.000	1.000
9	.649	.881	.949	.969	.000	1.000	.954	1.000	.000	.000	.000	1.000
10	.649	.884	.960	.992	.000	1.000	.954	1.000	.000	.000	.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.058	.111	.269	.000	.125	.207	.392	.000	.269	.385	.479
3	.105	.522	.592	.703	.607	.630	.718	.836	.000	.846	.993	.857
4	.491	.725	.781	.975	1.000	.880	.810	.983	.000	1.000	1.000	.991
5	.620	.842	.850	.992	1.000	.924	.872	1.000	.000	1.000	1.000	1.000
6	.713	.867	.903	1.000	1.000	.935	.916	1.000	.000	1.000	1.000	1.000
7	.760	.900	.914	1.000	1.000	.957	.925	1.000	.000	1.000	1.000	1.000
8	.801	.914	.933	1.000	1.000	.973	.941	1.000	.000	1.000	1.000	1.000
9	.819	.931	.942	1.000	1.000	1.000	.947	1.000	.000	1.000	1.000	1.000
10	.860	.939	.950	1.000	1.000	1.000	.958	1.000	.000	1.000	1.000	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.089	.131	.231	.000	.230	.250	.400	.000	.635	.396	.533
3	.250	.633	.697	.844	.911	.747	.836	.942	.000	1.000	.965	.947
4	.568	.828	.875	.975	.987	.922	.933	.983	.000	1.000	1.000	.992
5	.725	.903	.942	.992	1.000	.973	.956	1.000	.000	1.000	1.000	1.000
6	.831	.922	.967	1.000	1.000	1.000	.972	1.000	.000	1.000	1.000	1.000
7	.873	.950	.969	1.000	1.000	1.000	.975	1.000	.000	1.000	1.000	1.000
8	.903	.961	.978	1.000	1.000	1.000	.978	1.000	.000	1.000	1.000	1.000
9	.949	.969	.978	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000
10	.958	.969	.983	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000

TABLE A-4 (30 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.000	.256	.113	.000	.000	.000	.566	.000	.000	.000	.000
3	.000	.000	.744	.621	.000	.000	.600	.811	.000	.000	.000	.000
4	.000	.149	.860	.778	.000	.526	1.000	.811	.000	.000	.000	.000
5	.000	.319	.894	.857	.000	.632	1.000	.887	.000	.000	.000	.000
6	.000	.468	.918	.877	.000	.737	1.000	.887	.000	.000	.000	.000
7	.000	.617	.952	.897	.000	.737	1.000	.887	.000	.000	.000	.000
8	.000	.723	.952	.911	.000	.842	1.000	.943	.000	.000	.000	.000
9	.000	.809	.952	.916	.000	.842	1.000	.962	.000	.000	.000	.000
10	.000	.851	.952	.951	.000	.842	1.000	.962	.000	.000	.000	.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.000	.188	.125	.000	.000	.344	.305	.000	.000	.143	.647
3	.326	.000	.474	.445	.000	.000	.677	.534	.000	.000	.490	.850
4	.438	.071	.622	.561	.000	.100	.817	.621	.000	.000	.796	.895
5	.493	.185	.676	.657	.000	.375	.871	.687	.000	.000	1.000	1.000
6	.535	.287	.719	.708	.000	.538	.898	.718	.000	.000	1.000	1.000
7	.562	.327	.761	.708	.000	.638	.952	.747	.000	.000	1.000	1.000
8	.583	.386	.790	.737	.000	.675	.984	.770	.000	.000	1.000	1.000
9	.604	.433	.793	.756	.000	.737	.995	.784	.000	.000	1.000	1.000
10	.632	.504	.801	.779	.000	.737	1.000	.807	.000	.000	1.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.003	.211	.111	.000	.015	.279	.344	.000	.000	.250	.392
3	.269	.070	.531	.538	.057	.070	.547	.603	1.000	.019	.516	.625
4	.367	.194	.711	.674	.057	.170	.769	.736	1.000	.019	.828	.770
5	.448	.322	.831	.799	.075	.306	.865	.844	1.000	.074	.887	.884
6	.503	.432	.897	.872	.113	.480	.958	.900	1.000	.296	.945	.930
7	.577	.557	.961	.930	.264	.609	.979	.925	1.000	.370	.973	.930
8	.654	.629	.981	.930	.415	.679	.979	.931	1.000	.519	.973	.936
9	.717	.684	.981	.930	.491	.716	.979	.953	1.000	.593	.988	.953
10	.769	.722	.981	.953	.491	.760	.991	.953	1.000	.667	.988	.953

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.003	.045	.198	.173	.049	.060	.278	.397	.036	.049	.339	.448
3	.324	.235	.685	.719	.324	.257	.733	.806	1.000	.314	.751	.857
4	.474	.387	.872	.875	.451	.391	.928	.914	1.000	.422	.954	.922
5	.577	.465	.950	.919	.578	.517	.986	.919	1.000	.588	.988	.927
6	.676	.557	.992	.925	.647	.580	.997	.919	1.000	.627	.997	.944
7	.747	.630	1.000	.942	.706	.651	1.000	.936	1.000	.676	1.000	.944
8	.790	.667	1.000	.942	.775	.683	1.000	.942	1.000	.706	1.000	.955
9	.830	.700	1.000	.942	.794	.726	1.000	.964	1.000	.765	1.000	.966
10	.849	.748	1.000	.964	.794	.786	1.000	.964	1.000	.804	1.000	.966

TABLE A-5 (45 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.505	.222	.426	.000	.487	.718	.596	.000	.000	.696	.688
3	.545	.829	.833	.842	.933	.782	.850	.872	.000	.000	.922	.817
4	.687	.876	.890	.917	1.000	.859	.905	.923	.000	.000	1.000	.882
5	.721	.906	.914	.950	1.000	.923	.918	.949	.000	.000	1.000	.921
6	.755	.937	.929	.975	1.000	1.000	.932	.983	.000	.000	1.000	1.000
7	.773	.950	.939	1.000	1.000	1.000	.945	1.000	.000	.000	1.000	1.000
8	.785	.952	.947	1.000	1.000	1.000	.945	1.000	.000	.000	1.000	1.000
9	.807	.961	.954	1.000	1.000	1.000	.960	1.000	.000	.000	1.000	1.000
10	.824	.964	.960	1.000	1.000	1.000	.960	1.000	.000	.000	1.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.139	.540	.371	.522	.542	.763	.808	.783	1.000	.870	.848	.842
3	.631	.883	.894	.904	.830	.887	.914	.933	1.000	.949	.942	.942
4	.718	.944	.953	.975	.906	.962	.975	1.000	1.000	1.000	.993	1.000
5	.784	.981	.982	1.000	1.000	.978	.985	1.000	1.000	1.000	1.000	1.000
6	.806	.992	.985	1.000	1.000	.991	.987	1.000	1.000	1.000	1.000	1.000
7	.818	1.000	.987	1.000	1.000	1.000	.990	1.000	1.000	1.000	1.000	1.000
8	.826	1.000	.990	1.000	1.000	1.000	.990	1.000	1.000	1.000	1.000	1.000
9	.832	1.000	.990	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000
10	.848	1.000	.990	1.000	1.000	1.000	.993	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.374	.542	.529	.538	.713	.786	.825	.808	1.000	.838	.839	.858
3	.835	.894	.892	.904	.877	.906	.933	.929	1.000	.947	.936	.933
4	.903	.942	.967	.967	.950	.969	.993	1.000	1.000	1.000	1.000	1.000
5	.940	.978	1.000	1.000	1.000	.981	1.000	1.000	1.000	1.000	1.000	1.000
6	.962	.989	1.000	1.000	1.000	.992	1.000	1.000	1.000	1.000	1.000	1.000
7	.967	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.971	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.974	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.471	.542	.586	.575	.741	.803	.831	.817	.938	.823	.847	.872
3	.865	.918	.888	.921	.893	.926	.940	.946	1.000	.940	.947	.967
4	.924	.972	.961	.986	.943	.996	.982	1.000	1.000	1.000	1.000	1.000
5	.954	.996	1.000	1.000	.992	.996	1.000	1.000	1.000	1.000	1.000	1.000
6	.989	.996	1.000	1.000	1.000	.996	1.000	1.000	1.000	1.000	1.000	1.000
7	.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-5 (45 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.489	.567	.696	.668	.746	.800	.825	.817	.855	.817	.843	.871
3	.861	.908	.885	.900	.868	.922	.939	.933	.946	.925	.950	.954
4	.932	.967	.944	.967	.936	.992	.981	.992	1.000	1.000	.992	1.000
5	.967	1.000	.983	1.000	.975	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.533	.614	.700	.733	.739	.793	.808	.808	.796	.806	.842	.842
3	.874	.883	.879	.888	.879	.903	.925	.917	.927	.911	.931	.942
4	.931	.942	.928	.942	.935	.958	.975	.963	.975	.961	.975	.988
5	.958	.975	.965	.975	.967	.992	.992	.992	1.000	1.000	1.000	1.000
6	.978	.997	.989	1.000	.983	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-6 (45 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.311	.033	.242	.406	.000	.312	.389	.481	.000	.000	.467	.511
3	.550	.467	.636	.678	.636	.540	.657	.719	.000	.875	.667	.751
4	.666	.619	.736	.778	1.000	.641	.758	.792	.000	1.000	.759	.822
5	.738	.689	.783	.825	1.000	.707	.816	.842	.000	1.000	.805	.856
6	.775	.739	.825	.853	1.000	.764	.853	.858	.000	1.000	.851	.873
7	.808	.767	.858	.875	1.000	.786	.870	.892	.000	1.000	.874	.890
8	.838	.817	.875	.892	1.000	.826	.888	.892	.000	1.000	.874	.907
9	.858	.817	.892	.908	1.000	.826	.905	.908	.000	1.000	.897	.924
10	.864	.844	.892	.908	1.000	.848	.905	.925	.000	1.000	.897	.924

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.357	.253	.383	.447	.448	.464	.511	.613	1.000	.590	.586	.631
3	.660	.589	.725	.719	.762	.672	.761	.766	1.000	.768	.792	.794
4	.763	.708	.819	.839	.838	.761	.842	.872	1.000	.852	.858	.878
5	.816	.772	.864	.878	.876	.811	.875	.894	1.000	.897	.892	.900
6	.858	.814	.889	.900	.914	.844	.906	.916	1.000	.941	.908	.911
7	.875	.842	.908	.911	.933	.861	.922	.930	1.000	.959	.925	.925
8	.897	.864	.925	.925	.948	.883	.925	.930	1.000	.959	.939	.942
9	.903	.878	.925	.931	.948	.889	.939	.947	1.000	.974	.939	.942
10	.911	.883	.939	.942	.962	.897	.939	.947	1.000	.974	.942	.953

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.365	.319	.422	.450	.396	.489	.586	.633	.732	.608	.653	.686
3	.735	.642	.792	.825	.730	.717	.808	.847	.856	.770	.819	.853
4	.808	.753	.839	.858	.805	.800	.853	.869	.876	.832	.875	.881
5	.852	.811	.883	.886	.840	.839	.906	.897	.897	.867	.931	.908
6	.883	.850	.931	.908	.868	.872	.961	.919	.897	.897	.986	.925
7	.900	.872	.978	.925	.887	.889	.994	.942	.918	.906	.997	.942
8	.925	.894	.994	.942	.912	.906	.997	.947	.948	.920	1.000	.958
9	.939	.897	.997	.942	.928	.917	1.000	.958	.969	.938	1.000	.958
10	.947	.911	1.000	.958	.947	.925	1.000	.958	1.000	.938	1.000	.972

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.376	.339	.444	.486	.466	.508	.606	.632	.638	.591	.669	.689
3	.730	.667	.797	.819	.754	.731	.811	.880	.736	.780	.825	.878
4	.808	.761	.856	.886	.828	.797	.869	.914	.804	.846	.886	.919
5	.861	.814	.903	.925	.870	.844	.919	.947	.853	.880	.931	.947
6	.886	.847	.939	.947	.893	.872	.956	.961	.871	.900	.961	.956
7	.911	.872	.961	.956	.915	.889	.983	.967	.908	.917	.994	.961
8	.925	.894	.994	.961	.929	.911	1.000	.972	.933	.929	1.000	.967
9	.947	.906	1.000	.961	.944	.919	1.000	.972	.957	.940	1.000	.967
10	.958	.911	1.000	.967	.955	.928	1.000	.972	.969	.946	1.000	.972

TABLE A-6 (45 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.347	.325	.486	.469	.492	.503	.622	.619	.569	.578	.689	.708
3	.697	.697	.808	.825	.769	.758	.844	.936	.797	.797	.858	.942
4	.831	.786	.911	.942	.897	.836	.950	.953	.904	.858	.953	.958
5	.914	.847	.961	.958	.928	.886	.967	.964	.922	.906	.967	.969
6	.944	.889	.967	.964	.953	.928	.972	.969	.947	.928	.972	.975
7	.956	.922	.972	.969	.964	.944	.978	.975	.957	.947	.978	.981
8	.967	.942	.981	.975	.967	.964	.981	.981	.968	.964	.986	.981
9	.975	.956	.983	.975	.975	.967	.989	.981	.968	.972	.989	.981
10	.975	.964	.989	.981	.981	.978	.994	.981	.975	.981	.997	.986

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.319	.372	.439	.475	.461	.536	.589	.622	.520	.600	.717	.717
3	.728	.722	.833	.889	.817	.806	.900	.942	.866	.833	.917	.944
4	.928	.856	.953	.947	.942	.886	.994	.958	.941	.903	.997	.964
5	.950	.897	.997	.964	.953	.931	1.000	.969	.953	.939	1.000	.975
6	.958	.928	1.000	.969	.964	.950	1.000	.981	.963	.961	1.000	.981
7	.964	.944	1.000	.981	.969	.964	1.000	.986	.969	.969	1.000	.986
8	.969	.958	1.000	.981	.975	.969	1.000	.986	.972	.969	1.000	.986
9	.975	.964	1.000	.986	.981	.975	1.000	.992	.978	.975	1.000	.992
10	.978	.969	1.000	.986	.981	.975	1.000	.992	.981	.978	1.000	.992

TABLE A-7 (45 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.239	.098	.309	.000	.000	.133	.422	.000	.000	.000	1.000
3	.000	.682	.738	.821	.000	.000	.333	.663	.000	.000	.000	1.000
4	.000	.784	.835	.860	.000	.000	.533	.771	.000	.000	.000	1.000
5	.000	.852	.890	.900	.000	.000	.600	.771	.000	.000	.000	1.000
6	.000	.852	.902	.914	.000	.000	.767	.880	.000	.000	.000	1.000
7	.000	.898	.915	.940	.000	.000	.767	.880	.000	.000	.000	1.000
8	.000	.920	.945	.940	.000	.000	.767	.880	.000	.000	.000	1.000
9	.000	.920	.945	.940	.000	.000	.767	.880	.000	.000	.000	1.000
10	.000	.920	.945	.940	.000	.000	.767	.880	.000	.000	.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.244	.200	.347	.000	.320	.627	.745	.000	.000	.000	.692
3	.000	.753	.823	.850	.000	.640	.787	.863	.000	.000	.333	.805
4	.000	.851	.876	.897	.000	.720	.861	.907	.000	.000	.500	.865
5	.000	.885	.910	.917	.000	.800	.881	.907	.000	.000	.500	.887
6	.259	.915	.915	.942	.000	.800	.918	.944	.000	.000	.667	.925
7	.556	.925	.938	.950	.000	.880	.930	.944	.000	.000	.667	.925
8	.741	.925	.949	.950	.000	.880	.930	.944	.000	.000	.667	.925
9	.778	.939	.949	.950	.000	.880	.930	.944	.000	.000	.667	.947
10	.815	.953	.949	.950	.000	.880	.934	.953	.000	.000	.833	.962

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.022	.280	.222	.419	.375	.529	.669	.783	.000	1.000	.761	.792
3	.050	.768	.828	.861	.375	.778	.850	.875	.000	1.000	.883	.875
4	.210	.868	.878	.897	.875	.862	.896	.917	.000	1.000	.929	.911
5	.431	.899	.906	.917	.958	.889	.919	.933	.000	1.000	.939	.938
6	.514	.930	.922	.947	.958	.926	.937	.950	.000	1.000	.959	.947
7	.569	.944	.947	.950	1.000	.937	.957	.950	.000	1.000	.975	.964
8	.591	.944	.958	.950	1.000	.947	.963	.975	.000	1.000	.990	.973
9	.657	.961	.964	.975	1.000	.968	.963	.983	.000	1.000	.990	.991
10	.713	.966	.964	.983	1.000	.984	.971	.992	.000	1.000	1.000	.991

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.069	.325	.283	.508	.533	.618	.742	.769	.000	.850	.814	.803
3	.248	.806	.828	.864	.589	.841	.864	.881	.000	.942	.904	.883
4	.445	.889	.892	.903	.933	.890	.919	.917	.000	.958	.952	.917
5	.588	.922	.919	.925	.956	.924	.939	.950	.000	.975	.984	.958
6	.686	.939	.958	.950	.967	.944	.958	.983	.000	1.000	.997	.986
7	.745	.958	.961	.986	1.000	.967	.983	1.000	.000	1.000	1.000	1.000
8	.770	.975	.978	1.000	1.000	.987	.983	1.000	.000	1.000	1.000	1.000
9	.796	.994	.983	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000
10	.821	.994	.983	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000



TABLE A-7 (45 DEG, 60 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.184	.283	.453	.497	.668	.646	.728	.758	1.000	.839	.767	.808
3	.588	.861	.875	.864	.842	.869	.906	.914	1.000	.940	.922	.947
4	.749	.939	.972	.950	.960	.958	.978	.997	1.000	1.000	1.000	1.000
5	.805	.978	1.000	1.000	1.000	.989	1.000	1.000	1.000	1.000	1.000	1.000
6	.836	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	.850	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.859	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.864	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.873	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.275	.422	.475	.614	.701	.711	.797	.756	.982	.817	.833	.856
3	.744	.917	.953	.942	.894	.967	.992	1.000	1.000	1.000	1.000	1.000
4	.861	.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	.883	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	.919	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.931	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.939	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.947	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-8 (45 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.015	.000	.293	.023	.000	.000	.233	.495	.000	.000	.000	.000
3	.585	.069	.543	.410	.000	.152	.350	.619	.000	.000	.000	.000
4	.662	.466	.612	.516	.000	.273	.383	.638	.000	.000	.000	.000
5	.692	.519	.661	.601	.000	.273	.417	.695	.000	.000	.000	.000
6	.692	.557	.688	.658	.000	.333	.417	.714	.000	.000	.000	.000
7	.692	.618	.753	.704	.000	.333	.450	.714	.000	.000	.000	.000
8	.692	.664	.753	.746	.000	.333	.450	.733	.000	.000	.000	.000
9	.692	.664	.789	.772	.000	.333	.533	.771	.000	.000	.000	.000
10	.692	.664	.789	.795	.000	.333	.533	.771	.000	.000	.000	.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.004	.042	.233	.086	.000	.091	.255	.361	.000	.000	.314	.355
3	.219	.241	.492	.522	.000	.361	.568	.628	.000	.000	.507	.636
4	.426	.500	.647	.681	.000	.587	.674	.728	.000	.000	.657	.744
5	.577	.610	.767	.761	.000	.683	.761	.800	.000	.000	.715	.783
6	.672	.687	.808	.800	.000	.765	.786	.828	.000	.000	.787	.853
7	.717	.750	.811	.861	.000	.765	.832	.861	.000	.000	.792	.853
8	.766	.798	.867	.861	.000	.817	.851	.861	.000	.000	.850	.891
9	.777	.807	.867	.861	.000	.826	.888	.900	.000	.000	.850	.904
10	.823	.821	.886	.894	.000	.852	.891	.900	.000	.000	.855	.904

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.011	.128	.192	.128	.167	.180	.372	.419	1.000	.165	.441	.474
3	.244	.387	.561	.572	.500	.507	.619	.642	1.000	.732	.681	.677
4	.494	.571	.689	.678	.806	.685	.714	.739	1.000	.907	.760	.774
5	.663	.682	.775	.761	.944	.775	.789	.817	1.000	1.000	.814	.825
6	.733	.749	.806	.822	1.000	.811	.814	.822	1.000	1.000	.833	.836
7	.787	.797	.814	.822	1.000	.834	.833	.867	1.000	1.000	.850	.869
8	.809	.819	.867	.833	1.000	.839	.867	.867	1.000	1.000	.898	.903
9	.820	.836	.867	.867	1.000	.885	.900	.900	1.000	1.000	.898	.903
10	.874	.852	.886	.900	1.000	.896	.900	.900	1.000	1.000	.898	.903

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.042	.136	.211	.211	.246	.303	.408	.433	1.000	.439	.483	.517
3	.293	.461	.611	.617	.614	.528	.631	.672	1.000	.731	.683	.694
4	.492	.597	.703	.692	.784	.694	.728	.744	1.000	.863	.761	.794
5	.673	.703	.797	.789	.865	.783	.833	.833	1.000	.920	.833	.844
6	.749	.786	.833	.833	.912	.828	.856	.867	1.000	.958	.856	.867
7	.791	.828	.856	.867	.947	.856	.856	.867	1.000	.958	.856	.878
8	.827	.844	.856	.867	.947	.861	.875	.917	1.000	.986	.906	.922
9	.841	.872	.894	.900	.971	.894	.919	.922	1.000	.986	.919	.922
10	.872	.883	.908	.917	.971	.906	.919	.922	1.000	.986	.919	.922

TABLE A-8 (45 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.089	.119	.234	.356	.201	.417	.403	.439	.946	.517	.531	.511
3	.359	.572	.694	.761	.555	.622	.719	.794	1.000	.718	.753	.800
4	.532	.653	.813	.797	.728	.711	.844	.833	1.000	.806	.844	.844
5	.624	.756	.900	.856	.795	.772	.897	.861	1.000	.853	.897	.883
6	.682	.794	.916	.883	.837	.819	.919	.886	1.000	.890	.919	.903
7	.727	.831	.922	.883	.852	.875	.950	.917	1.000	.906	.956	.939
8	.780	.881	.955	.919	.866	.894	.969	.939	1.000	.922	.969	.939
9	.813	.892	.972	.939	.901	.906	.969	.939	1.000	.947	.969	.939
10	.872	.906	.972	.939	.919	.917	.969	.939	1.000	.947	.969	.939

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.187	.117	.278	.464	.252	.517	.503	.558	.677	.578	.631	.631
3	.550	.661	.808	.839	.664	.708	.828	.894	.962	.761	.842	.911
4	.715	.783	.919	.906	.824	.808	.947	.944	.977	.865	.969	.944
5	.816	.853	.978	.939	.891	.861	.978	.944	.992	.899	1.000	.961
6	.846	.875	.992	.944	.939	.889	1.000	.961	1.000	.922	1.000	.961
7	.877	.892	1.000	.958	.945	.892	1.000	.961	1.000	.922	1.000	.967
8	.880	.903	1.000	.967	.945	.903	1.000	.967	1.000	.948	1.000	.967
9	.894	.903	1.000	.967	.961	.914	1.000	.967	1.000	.948	1.000	.967
10	.902	.914	1.000	.967	.964	.917	1.000	.967	1.000	.948	1.000	.967

TABLE A-9 (60 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.556	.408	.347	.565	.091	.764	.742	.739	.000	.143	.822	.769
3	.817	.827	.819	.833	.227	.842	.856	.858	.000	1.000	.919	.864
4	.873	.880	.869	.892	.727	.909	.890	.904	.000	1.000	.956	.905
5	.895	.905	.904	.921	.909	.938	.923	.933	.000	1.000	.981	.927
6	.906	.925	.919	.942	1.000	.953	.946	.946	.000	1.000	.994	.941
7	.913	.933	.936	.950	1.000	.964	.956	.958	.000	1.000	1.000	.955
8	.920	.947	.950	.958	1.000	.974	.960	.958	.000	1.000	1.000	.955
9	.929	.953	.954	.975	1.000	.984	.960	.975	.000	1.000	1.000	.973
10	.944	.964	.961	.975	1.000	.995	.971	.983	.000	1.000	1.000	.982

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.661	.471	.564	.690	.678	.742	.772	.750	.680	.737	.789	.812
3	.817	.853	.835	.846	.817	.867	.883	.875	1.000	.857	.883	.900
4	.874	.903	.894	.917	.869	.908	.928	.925	1.000	.912	.931	.929
5	.908	.928	.944	.942	.912	.933	.947	.950	1.000	.944	.947	.958
6	.926	.947	.961	.967	.937	.953	.962	.975	1.000	.968	.976	1.000
7	.940	.964	.975	.983	.955	.975	.987	1.000	1.000	1.000	.997	1.000
8	.944	.981	.993	.992	.970	.986	1.000	1.000	1.000	1.000	1.000	1.000
9	.961	.986	1.000	1.000	.985	.986	1.000	1.000	1.000	1.000	1.000	1.000
10	.972	.986	1.000	1.000	1.000	.992	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.667	.547	.629	.675	.666	.758	.758	.758	.554	.752	.803	.808
3	.842	.842	.833	.858	.828	.867	.892	.878	.837	.865	.892	.900
4	.886	.908	.906	.917	.880	.919	.936	.933	.886	.917	.936	.950
5	.918	.942	.936	.950	.912	.953	.964	.958	.918	.948	.964	.975
6	.944	.975	.956	.975	.935	.975	.981	.983	.951	.991	.981	.992
7	.961	.992	.975	.992	.963	1.000	.992	1.000	1.000	1.000	.992	1.000
8	.978	.997	.986	1.000	.976	1.000	.997	1.000	1.000	1.000	1.000	1.000
9	.979	1.000	.997	1.000	.981	1.000	.997	1.000	1.000	1.000	1.000	1.000
10	.985	1.000	.997	1.000	.990	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.650	.578	.642	.658	.683	.742	.742	.742	.509	.758	.792	.792
3	.838	.825	.839	.842	.836	.875	.875	.875	.754	.875	.892	.892
4	.899	.892	.903	.904	.901	.919	.925	.925	.871	.919	.931	.942
5	.933	.925	.931	.942	.931	.950	.958	.950	.925	.950	.958	.958
6	.949	.958	.956	.958	.947	.964	.975	.975	.949	.964	.975	.975
7	.962	.975	.972	.975	.961	.978	.992	.979	.970	.992	.992	.992
8	.975	.975	.975	.988	.974	.992	.992	.992	1.000	1.000	1.000	1.000
9	.978	.992	.992	.992	.981	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.986	.997	.994	1.000	.986	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-9 (60 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.611	.636	.618	.625	.678	.708	.732	.713	.633	.747	.758	.775
3	.804	.808	.808	.808	.821	.842	.842	.842	.793	.856	.858	.858
4	.869	.867	.875	.875	.875	.892	.892	.892	.855	.892	.908	.908
5	.907	.897	.908	.908	.908	.925	.925	.925	.883	.925	.942	.942
6	.925	.925	.925	.925	.925	.942	.942	.942	.904	.942	.958	.958
7	.942	.942	.942	.942	.942	.958	.958	.958	.926	.958	.958	.958
8	.958	.956	.958	.958	.958	.958	.958	.958	.947	.958	.975	.975
9	.958	.958	.958	.958	.958	.975	.975	.975	.947	.975	.975	.975
10	.975	.975	.975	.975	.975	.975	.975	.975	.968	.975	.992	.992

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.575	.653	.590	.621	.657	.697	.725	.713	.689	.742	.742	.758
3	.782	.806	.775	.808	.803	.825	.842	.825	.814	.842	.842	.858
4	.850	.858	.842	.858	.861	.875	.875	.875	.867	.889	.892	.892
5	.883	.892	.875	.892	.892	.900	.908	.908	.897	.908	.908	.908
6	.900	.908	.899	.908	.908	.922	.925	.925	.919	.925	.925	.925
7	.917	.925	.911	.925	.925	.925	.936	.925	.920	.942	.942	.942
8	.925	.936	.925	.942	.942	.942	.942	.942	.938	.942	.942	.942
9	.936	.942	.936	.942	.942	.942	.942	.942	.938	.947	.958	.958
10	.942	.942	.942	.942	.942	.958	.958	.958	.956	.958	.958	.958

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.557	.647	.568	.629	.647	.703	.725	.713	.711	.742	.756	.758
3	.792	.806	.792	.808	.813	.831	.842	.833	.832	.842	.858	.858
4	.858	.864	.858	.867	.871	.892	.892	.892	.879	.892	.908	.908
5	.896	.892	.901	.900	.904	.925	.925	.925	.908	.925	.925	.925
6	.925	.925	.925	.925	.925	.942	.942	.942	.925	.942	.942	.942
7	.942	.942	.942	.942	.942	.958	.958	.958	.942	.958	.958	.958
8	.954	.942	.958	.958	.954	.958	.958	.958	.958	.958	.975	.975
9	.958	.958	.958	.958	.958	.975	.975	.975	.958	.975	.975	.975
10	.971	.964	.975	.975	.971	.975	.975	.975	.971	.975	.975	.992

TABLE A-10 (60 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.314	.203	.194	.311	1.000	.450	.401	.444	.000	1.000	.530	.497
3	.614	.500	.586	.633	1.000	.625	.646	.667	.000	1.000	.713	.700
4	.709	.622	.722	.750	1.000	.713	.758	.783	.000	1.000	.800	.800
5	.769	.700	.800	.817	1.000	.777	.852	.850	.000	1.000	.870	.875
6	.811	.750	.839	.867	1.000	.825	.872	.875	.000	1.000	.887	.892
7	.840	.783	.875	.892	1.000	.845	.891	.892	.000	1.000	.904	.908
8	.866	.811	.892	.908	1.000	.862	.908	.908	.000	1.000	.922	.925
9	.869	.833	.892	.908	1.000	.880	.925	.925	.000	1.000	.922	.925
10	.886	.850	.908	.925	1.000	.880	.925	.925	.000	1.000	.939	.942

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.387	.250	.344	.419	.723	.519	.519	.536	.891	.793	.597	.589
3	.643	.656	.644	.689	.864	.725	.722	.733	1.000	1.000	.775	.792
4	.813	.742	.775	.808	1.000	.794	.825	.825	1.000	1.000	.842	.842
5	.847	.781	.825	.842	1.000	.833	.858	.858	1.000	1.000	.875	.875
6	.880	.811	.858	.875	1.000	.872	.875	.892	1.000	1.000	.908	.892
7	.897	.850	.875	.892	1.000	.889	.892	.908	1.000	1.000	.908	.908
8	.914	.867	.892	.908	1.000	.894	.908	.908	1.000	1.000	.925	.925
9	.914	.872	.908	.908	1.000	.911	.925	.925	1.000	1.000	.942	.925
10	.930	.889	.908	.925	1.000	.928	.925	.925	1.000	1.000	.942	.942

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.403	.269	.464	.432	.599	.539	.556	.583	.664	.672	.633	.650
3	.694	.686	.694	.758	.863	.772	.769	.789	.969	.926	.822	.828
4	.828	.831	.833	.850	.973	.847	.853	.856	1.000	.981	.869	.867
5	.853	.858	.864	.872	.986	.881	.878	.881	1.000	.994	.886	.897
6	.886	.867	.881	.903	1.000	.897	.886	.903	1.000	1.000	.908	.903
7	.897	.886	.886	.908	1.000	.908	.894	.908	1.000	1.000	.908	.908
8	.908	.897	.894	.914	1.000	.925	.908	.908	1.000	1.000	.925	.925
9	.908	.897	.908	.914	1.000	.925	.925	.925	1.000	1.000	.942	.925
10	.925	.908	.908	.930	1.000	.942	.925	.925	1.000	1.000	.942	.942

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.392	.283	.461	.411	.517	.539	.572	.619	.665	.615	.650	.672
3	.714	.661	.733	.750	.815	.783	.794	.806	.918	.822	.833	.839
4	.822	.817	.839	.861	.917	.858	.867	.881	1.000	.913	.878	.892
5	.864	.875	.881	.892	.942	.892	.892	.903	1.000	.936	.908	.914
6	.892	.906	.906	.914	.960	.908	.919	.925	1.000	.965	.925	.925
7	.908	.919	.925	.925	.972	.925	.925	.925	1.000	.971	.939	.942
8	.919	.931	.931	.931	.972	.936	.939	.942	1.000	.983	.939	.953
9	.925	.936	.939	.942	.982	.936	.939	.942	1.000	.983	.953	.953
10	.933	.942	.939	.942	.982	.947	.950	.953	1.000	.988	.953	.953

TABLE A-10 (60 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.364	.281	.428	.406	.456	.506	.556	.582	.612	.564	.631	.656
3	.689	.650	.753	.767	.717	.742	.786	.827	.824	.764	.817	.844
4	.806	.786	.847	.886	.828	.850	.883	.916	.940	.861	.900	.914
5	.867	.864	.900	.917	.892	.892	.939	.936	.964	.897	.961	.931
6	.908	.897	.958	.931	.914	.908	.989	.942	.972	.919	.994	.947
7	.925	.914	.992	.942	.936	.925	.994	.953	.992	.925	.997	.958
8	.939	.931	.994	.947	.947	.931	.997	.967	1.000	.942	.997	.961
9	.950	.933	.997	.958	.956	.942	.997	.967	1.000	.942	1.000	.972
10	.956	.947	.997	.961	.961	.947	1.000	.978	1.000	.958	1.000	.972

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.328	.314	.394	.397	.447	.497	.536	.556	.542	.542	.622	.628
3	.653	.636	.722	.714	.683	.714	.775	.789	.732	.744	.797	.833
4	.769	.756	.828	.883	.794	.817	.856	.911	.831	.828	.886	.928
5	.856	.814	.906	.928	.889	.867	.925	.950	.912	.894	.942	.956
6	.914	.878	.944	.953	.925	.900	.956	.961	.953	.919	.967	.969
7	.928	.900	.969	.956	.944	.925	.981	.981	.959	.925	.989	.981
8	.947	.925	.992	.981	.947	.931	1.000	.986	.969	.942	1.000	.992
9	.961	.931	1.000	.986	.969	.942	1.000	.992	.983	.942	1.000	.992
10	.969	.942	1.000	.992	.972	.947	1.000	.997	.986	.958	1.000	.997

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.323	.353	.375	.400	.433	.494	.503	.556	.516	.544	.606	.625
3	.627	.619	.722	.689	.678	.692	.758	.756	.708	.719	.786	.853
4	.766	.736	.811	.858	.819	.783	.867	.900	.839	.806	.878	.906
5	.869	.800	.906	.903	.883	.850	.936	.928	.882	.864	.936	.950
6	.914	.847	.936	.928	.914	.897	.958	.950	.910	.900	.958	.956
7	.944	.889	.958	.950	.944	.919	.964	.961	.941	.931	.981	.972
8	.953	.911	.964	.956	.967	.942	.981	.972	.966	.953	.981	.978
9	.975	.942	.981	.972	.972	.956	.986	.978	.978	.969	.994	.986
10	.975	.956	.983	.972	.981	.969	.994	.986	.978	.975	.994	.986

TABLE A-11 (60 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.608	.000	.009	.000	.000	.100	.808	.000	.000	.000	.000
3	.000	.649	.765	.591	.000	.000	.100	.808	.000	.000	.000	.000
4	.000	.730	.866	.783	.000	.000	.100	.846	.000	.000	.000	.000
5	.000	.784	.899	.839	.000	.000	.300	.885	.000	.000	.000	.000
6	.000	.838	.908	.854	.000	.000	.300	.885	.000	.000	.000	.000
7	.000	.838	.945	.904	.000	.000	.300	.885	.000	.000	.000	.000
8	.000	.838	.945	.904	.000	.000	.500	.885	.000	.000	.000	.000
9	.000	.919	.945	.916	.000	.000	.500	.885	.000	.000	.000	.000
10	.000	.919	.968	.938	.000	.000	.500	.885	.000	.000	.000	.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.438	.436	.208	.428	.000	.656	.588	.634	.000	.000	.878	.649
3	.656	.734	.761	.808	.000	.817	.773	.813	.000	.000	.939	.774
4	.734	.813	.833	.892	.000	.903	.837	.891	.000	.000	.939	.872
5	.797	.857	.881	.925	.000	.946	.875	.925	.000	.000	1.000	.928
6	.828	.898	.894	.933	.000	.989	.920	.941	.000	.000	1.000	.958
7	.836	.915	.928	.969	.000	1.000	.920	.989	.000	.000	1.000	1.000
8	.867	.933	.931	.989	.000	1.000	.952	.989	.000	.000	1.000	1.000
9	.875	.933	.939	.989	.000	1.000	.952	.989	.000	.000	1.000	1.000
10	.875	.933	.944	.994	.000	1.000	.952	.994	.000	.000	1.000	1.000

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.193	.467	.539	.617	.627	.686	.672	.697	.000	.605	.727	.739
3	.636	.789	.767	.825	.831	.858	.861	.861	.000	.974	.932	.906
4	.715	.903	.922	.975	.983	.947	.958	.975	.000	1.000	1.000	.975
5	.801	.936	.958	.983	1.000	.972	.964	.983	.000	1.000	1.000	.989
6	.835	.972	.964	.983	1.000	1.000	.972	1.000	.000	1.000	1.000	1.000
7	.861	.978	.969	1.000	1.000	1.000	.972	1.000	.000	1.000	1.000	1.000
8	.883	.978	.972	1.000	1.000	1.000	.978	1.000	.000	1.000	1.000	1.000
9	.896	.983	.972	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000
10	.915	.983	.978	1.000	1.000	1.000	.983	1.000	.000	1.000	1.000	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.166	.458	.533	.608	.422	.650	.678	.697	1.000	.670	.731	.769
3	.688	.833	.814	.853	.878	.921	.942	.983	1.000	1.000	.964	.986
4	.792	.936	1.000	1.000	1.000	.958	1.000	1.000	1.000	1.000	1.000	1.000
5	.834	.978	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	.857	.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	.888	.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.902	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.904	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.921	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000



TABLE A-11 (60 DEG, 60 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.253	.372	.542	.656	.529	.747	.861	.850	.847	.800	.892	.925
3	.853	1.000	1.000	1.000	.905	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4	.947	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	.950	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	.956	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	.956	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.961	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.961	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.964	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.406	.561	.611	.781	.766	.950	.992	1.000	1.000	1.000	1.000	1.000
3	.933	1.000	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.592	.742	.792	.931	.957	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3	.958	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-12 (60 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.007	.129	.030	.000	.000	.032	.155	.346	.000	.000	.105	.261
3	.327	.452	.563	.554	.000	.323	.466	.580	.000	.000	.421	.522
4	.533	.613	.675	.699	.000	.516	.640	.710	.000	.000	.526	.609
5	.627	.673	.747	.761	.000	.621	.714	.755	.000	.000	.632	.696
6	.707	.700	.798	.801	.000	.734	.727	.784	.000	.000	.737	.783
7	.800	.756	.819	.852	.000	.734	.801	.844	.000	.000	.737	.783
8	.800	.774	.855	.869	.000	.734	.801	.844	.000	.000	.842	.783
9	.800	.839	.855	.869	.000	.831	.801	.844	.000	.000	.842	.870
10	.813	.839	.855	.869	.000	.831	.876	.888	.000	.000	.842	.870

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.109	.228	.342	.253	.000	.426	.464	.467	.000	.000	.492	.496
3	.525	.564	.600	.578	.000	.629	.648	.667	.000	.000	.698	.700
4	.659	.695	.717	.711	.000	.732	.754	.767	.000	.000	.776	.770
5	.731	.764	.769	.778	.000	.794	.797	.817	.000	.000	.803	.822
6	.778	.815	.833	.817	.000	.832	.834	.833	.000	.000	.871	.869
7	.850	.815	.842	.878	.000	.855	.871	.894	.000	.000	.871	.898
8	.850	.872	.875	.894	.000	.855	.871	.894	.000	.000	.929	.898
9	.850	.877	.892	.894	.000	.894	.897	.894	.000	.000	.939	.948
10	.856	.877	.908	.894	.000	.894	.940	.942	.000	.000	.939	.948

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.092	.214	.347	.261	.283	.408	.450	.478	.778	.765	.508	.522
3	.486	.558	.600	.594	.906	.628	.661	.667	1.000	.912	.700	.703
4	.644	.686	.733	.728	.934	.747	.783	.803	1.000	.963	.783	.806
5	.725	.769	.783	.800	.991	.819	.844	.839	1.000	1.000	.861	.842
6	.786	.817	.861	.869	1.000	.856	.861	.869	1.000	1.000	.894	.903
7	.822	.822	.869	.903	1.000	.875	.903	.903	1.000	1.000	.917	.917
8	.839	.858	.903	.903	1.000	.875	.917	.917	1.000	1.000	.950	.917
9	.856	.869	.917	.917	1.000	.908	.917	.917	1.000	1.000	.950	.950
10	.867	.875	.917	.917	1.000	.908	.950	.950	1.000	1.000	.950	.950

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.089	.206	.339	.298	.243	.389	.447	.490	.629	.676	.517	.531
3	.534	.575	.603	.638	.862	.667	.689	.705	.943	.900	.733	.739
4	.673	.756	.758	.791	.967	.797	.825	.827	1.000	1.000	.839	.833
5	.760	.806	.847	.847	1.000	.844	.881	.880	1.000	1.000	.883	.883
6	.810	.839	.881	.880	1.000	.878	.883	.886	1.000	1.000	.917	.917
7	.844	.844	.883	.919	1.000	.878	.917	.919	1.000	1.000	.917	.917
8	.863	.878	.917	.919	1.000	.892	.917	.919	1.000	1.000	.917	.917
9	.872	.886	.917	.919	1.000	.925	.917	.919	1.000	1.000	.950	.950
10	.877	.892	.917	.919	1.000	.925	.950	.953	1.000	1.000	.950	.950

TABLE A-12 (60 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.109	.186	.331	.309	.231	.403	.500	.500	.528	.597	.575	.611
3	.610	.719	.678	.713	.899	.789	.783	.783	1.000	.986	.817	.817
4	.808	.803	.817	.819	1.000	.847	.850	.850	1.000	1.000	.850	.850
5	.841	.847	.850	.852	1.000	.881	.883	.883	1.000	1.000	.883	.883
6	.875	.861	.883	.886	1.000	.881	.883	.883	1.000	1.000	.917	.917
7	.877	.881	.883	.891	1.000	.914	.917	.917	1.000	1.000	.917	.917
8	.908	.897	.917	.919	1.000	.914	.917	.917	1.000	1.000	.917	.917
9	.911	.914	.917	.919	1.000	.914	.917	.917	1.000	1.000	.950	.950
10	.911	.914	.917	.919	1.000	.947	.950	.950	1.000	1.000	.950	.950

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.128	.214	.328	.362	.266	.575	.611	.578	.660	.719	.711	.725
3	.741	.774	.775	.786	.914	.806	.806	.825	1.000	.941	.844	.850
4	.838	.855	.875	.886	.977	.869	.881	.883	1.000	.978	.900	.914
5	.872	.883	.900	.916	1.000	.903	.903	.914	1.000	1.000	.903	.914
6	.903	.894	.903	.916	1.000	.903	.908	.914	1.000	1.000	.922	.917
7	.903	.905	.908	.916	1.000	.917	.922	.917	1.000	1.000	.922	.917
8	.922	.905	.922	.919	1.000	.917	.922	.917	1.000	1.000	.922	.917
9	.922	.919	.922	.919	1.000	.917	.922	.917	1.000	1.000	.950	.950
10	.922	.919	.922	.919	1.000	.950	.950	.950	1.000	1.000	.950	.950

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.242	.281	.372	.517	.475	.706	.733	.703	1.000	.779	.792	.794
3	.756	.788	.836	.860	.866	.839	.867	.872	1.000	.879	.867	.894
4	.853	.875	.889	.899	.922	.883	.917	.917	1.000	.925	.917	.917
5	.883	.911	.917	.922	.946	.917	.917	.917	1.000	.948	.922	.942
6	.906	.930	.933	.955	.958	.928	.950	.950	1.000	.971	.950	.950
7	.917	.933	.950	.955	.970	.939	.950	.950	1.000	.971	.950	.950
8	.933	.942	.950	.955	.970	.939	.950	.950	1.000	.971	.950	.950
9	.933	.942	.950	.955	.970	.939	.950	.950	1.000	.971	.950	.972
10	.933	.942	.950	.955	.970	.939	.950	.972	1.000	.971	.972	.983

TABLE A-13 (75 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.788	.185	.446	.671	.000	.851	.726	.725	.000	.000	.894	.772
3	.857	.803	.806	.808	.000	.913	.841	.842	.000	.000	.925	.865
4	.896	.869	.872	.875	.000	.934	.888	.896	.000	.333	.947	.903
5	.918	.900	.907	.904	.000	.944	.913	.917	.000	1.000	.965	.928
6	.936	.914	.919	.929	.000	.948	.925	.929	.000	1.000	.972	.941
7	.947	.928	.932	.942	.375	.958	.940	.942	.000	1.000	.982	.941
8	.952	.942	.937	.942	.750	.969	.954	.954	.000	1.000	.989	.954
9	.959	.942	.946	.954	.875	.972	.954	.954	.000	1.000	.993	.958
10	.959	.956	.951	.954	.875	.979	.959	.967	.000	1.000	1.000	.966

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.625	.354	.551	.625	.304	.725	.706	.708	.072	.476	.758	.758
3	.808	.789	.808	.808	.625	.842	.842	.842	.406	.713	.875	.875
4	.875	.858	.875	.875	.732	.908	.892	.908	.601	.814	.925	.908
5	.908	.892	.908	.908	.804	.925	.925	.925	.746	.848	.939	.942
6	.938	.925	.933	.942	.866	.953	.942	.950	.812	.904	.947	.958
7	.950	.942	.942	.958	.893	.953	.958	.958	.877	.915	.961	.975
8	.954	.958	.958	.958	.902	.964	.975	.975	.877	.927	.975	.975
9	.964	.958	.975	.975	.923	.975	.975	.975	.928	.949	.989	.983
10	.968	.975	.975	.975	.932	.975	.992	.983	.949	.961	.992	.992

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.608	.426	.565	.608	.453	.700	.692	.692	.257	.577	.742	.742
3	.792	.781	.789	.792	.693	.825	.825	.825	.543	.756	.858	.842
4	.858	.842	.858	.858	.800	.892	.875	.875	.674	.833	.892	.892
5	.892	.875	.892	.892	.847	.908	.908	.908	.761	.876	.925	.925
6	.925	.908	.908	.925	.880	.925	.925	.925	.804	.910	.942	.942
7	.942	.925	.925	.942	.907	.942	.942	.942	.848	.910	.958	.958
8	.942	.942	.942	.942	.907	.958	.958	.958	.848	.936	.958	.958
9	.958	.942	.958	.958	.933	.958	.958	.958	.891	.936	.975	.975
10	.958	.958	.958	.958	.933	.975	.975	.975	.891	.962	.975	.975

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.592	.506	.551	.592	.512	.675	.692	.675	.385	.635	.725	.742
3	.775	.775	.768	.775	.714	.808	.808	.808	.641	.768	.842	.842
4	.842	.842	.842	.842	.806	.858	.865	.858	.744	.834	.875	.875
5	.875	.875	.875	.875	.851	.892	.892	.892	.778	.878	.908	.908
6	.892	.892	.892	.892	.874	.908	.908	.908	.812	.900	.925	.925
7	.908	.908	.908	.908	.897	.925	.925	.925	.846	.900	.942	.942
8	.925	.925	.925	.925	.897	.942	.942	.942	.880	.923	.942	.942
9	.942	.933	.942	.942	.920	.942	.942	.942	.880	.923	.958	.958
10	.942	.942	.942	.942	.920	.958	.958	.958	.915	.945	.958	.958

TABLE A-13 (75 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.550	.592	.538	.575	.581	.675	.692	.658	.525	.692	.725	.733
3	.775	.775	.758	.775	.770	.825	.814	.808	.729	.804	.842	.842
4	.842	.842	.842	.842	.837	.875	.875	.875	.806	.860	.892	.892
5	.892	.875	.892	.892	.876	.908	.908	.908	.858	.897	.925	.925
6	.908	.903	.908	.908	.909	.925	.925	.925	.884	.916	.942	.942
7	.925	.925	.925	.925	.914	.942	.942	.942	.910	.935	.958	.958
8	.942	.931	.942	.942	.933	.958	.958	.958	.910	.953	.958	.958
9	.958	.942	.958	.958	.952	.958	.958	.958	.935	.953	.975	.975
10	.958	.958	.958	.958	.952	.975	.968	.975	.935	.972	.975	.975

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.574	.589	.553	.592	.649	.708	.692	.692	.616	.723	.758	.742
3	.808	.781	.806	.808	.820	.858	.842	.850	.792	.858	.875	.875
4	.892	.858	.875	.892	.889	.908	.908	.908	.857	.908	.925	.925
5	.925	.908	.925	.925	.923	.942	.942	.942	.901	.941	.958	.958
6	.946	.942	.942	.950	.957	.958	.958	.958	.945	.975	.975	.975
7	.971	.958	.958	.975	.974	.975	.975	.975	.967	.992	.992	.992
8	.975	.975	.975	.975	.986	.992	.992	.992	.989	.992	.992	.992
9	.992	.975	.992	.992	.991	.994	.992	1.000	1.000	1.000	1.000	1.000
10	.992	.992	.992	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.621	.586	.572	.625	.683	.742	.708	.725	.694	.758	.792	.792
3	.842	.808	.842	.842	.858	.892	.875	.892	.843	.892	.908	.908
4	.925	.908	.922	.925	.925	.942	.942	.942	.917	.958	.975	.958
5	.958	.942	.958	.958	.975	.975	.975	.975	.972	.992	.992	.992
6	.992	.975	.992	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.642	.583	.575	.642	.692	.758	.725	.742	.712	.775	.808	.808
3	.871	.831	.858	.875	.875	.908	.897	.908	.869	.908	.942	.925
4	.942	.925	.942	.942	.942	.975	.958	.975	.956	.975	.992	.992
5	.975	.968	.975	.975	.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-14 (75 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.381	.097	.234	.387	.595	.492	.478	.501	.000	.653	.556	.557
3	.617	.602	.613	.655	.738	.708	.669	.721	.000	.878	.728	.755
4	.733	.713	.735	.777	.976	.783	.781	.811	.000	1.000	.817	.827
5	.819	.766	.799	.827	1.000	.822	.836	.844	.000	1.000	.869	.844
6	.844	.811	.850	.855	1.000	.844	.878	.872	.000	1.000	.894	.889
7	.861	.827	.872	.872	1.000	.867	.906	.905	.000	1.000	.925	.922
8	.886	.850	.894	.905	1.000	.883	.908	.922	.000	1.000	.925	.930
9	.903	.872	.914	.922	1.000	.889	.925	.930	.000	1.000	.942	.947
10	.911	.872	.914	.930	1.000	.906	.925	.947	.000	1.000	.942	.947

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.367	.142	.242	.374	.599	.521	.467	.504	.308	.712	.600	.567
3	.683	.600	.632	.693	.843	.738	.717	.738	.703	.915	.800	.767
4	.800	.750	.772	.810	.948	.838	.833	.838	1.000	1.000	.858	.858
5	.858	.817	.847	.866	1.000	.880	.875	.880	1.000	1.000	.892	.892
6	.892	.858	.864	.899	1.000	.914	.892	.897	1.000	1.000	.908	.908
7	.908	.875	.897	.916	1.000	.914	.908	.914	1.000	1.000	.925	.925
8	.908	.892	.897	.916	1.000	.930	.925	.930	1.000	1.000	.942	.925
9	.925	.908	.914	.933	1.000	.947	.925	.930	1.000	1.000	.942	.942
10	.925	.925	.930	.933	1.000	.947	.942	.947	1.000	1.000	.942	.942

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.383	.186	.281	.429	.654	.517	.467	.487	.511	.750	.600	.571
3	.667	.589	.621	.671	.848	.733	.700	.721	.766	.908	.783	.772
4	.783	.733	.755	.788	.931	.833	.817	.822	.936	.987	.867	.855
5	.850	.817	.838	.855	1.000	.875	.875	.880	1.000	1.000	.892	.897
6	.892	.850	.880	.897	1.000	.908	.892	.897	1.000	1.000	.908	.914
7	.908	.892	.897	.914	1.000	.925	.908	.914	1.000	1.000	.925	.930
8	.908	.892	.914	.914	1.000	.925	.925	.930	1.000	1.000	.942	.930
9	.925	.908	.914	.930	1.000	.942	.925	.930	1.000	1.000	.942	.947
10	.925	.925	.930	.930	1.000	.942	.942	.947	1.000	1.000	.942	.947

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.408	.245	.360	.421	.647	.531	.489	.517	.596	.749	.592	.575
3	.667	.604	.631	.671	.843	.733	.700	.717	.781	.896	.767	.761
4	.767	.721	.760	.772	.916	.817	.800	.800	.882	.942	.850	.833
5	.833	.805	.827	.838	.964	.883	.864	.867	.983	.988	.883	.883
6	.883	.855	.877	.889	1.000	.908	.892	.908	1.000	1.000	.908	.908
7	.908	.889	.902	.914	1.000	.925	.908	.908	1.000	1.000	.925	.925
8	.925	.914	.919	.930	1.000	.925	.925	.925	1.000	1.000	.942	.925
9	.925	.914	.919	.930	1.000	.942	.925	.942	1.000	1.000	.942	.942
10	.942	.930	.936	.947	1.000	.942	.942	.942	1.000	1.000	.942	.942

TABLE A-14 (75 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.393	.242	.411	.398	.567	.528	.525	.540	.656	.659	.600	.597
3	.671	.650	.653	.688	.833	.725	.719	.735	.802	.864	.756	.758
4	.760	.731	.756	.766	.887	.783	.778	.788	.881	.930	.817	.817
5	.822	.772	.800	.822	.928	.850	.833	.855	.907	.950	.883	.850
6	.855	.833	.833	.855	.949	.883	.883	.889	.934	.970	.900	.883
7	.889	.850	.867	.889	.969	.917	.883	.922	.960	.990	.917	.917
8	.922	.883	.883	.922	.990	.917	.917	.922	.987	.990	.933	.933
9	.922	.900	.917	.922	.990	.933	.933	.939	1.000	1.000	.942	.942
10	.939	.917	.917	.939	1.000	.942	.942	.947	1.000	1.000	.958	.942

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.361	.258	.378	.367	.492	.508	.528	.560	.645	.589	.597	.611
3	.650	.631	.675	.689	.740	.703	.717	.735	.803	.780	.744	.753
4	.750	.750	.747	.781	.835	.800	.783	.813	.849	.857	.817	.819
5	.806	.811	.817	.819	.878	.847	.847	.855	.896	.908	.867	.867
6	.836	.847	.850	.850	.905	.869	.875	.883	.919	.932	.894	.878
7	.864	.869	.878	.878	.930	.889	.894	.900	.919	.949	.906	.906
8	.889	.875	.894	.894	.948	.906	.900	.911	.942	.955	.922	.928
9	.894	.894	.900	.906	.954	.922	.914	.933	.942	.973	.922	.928
10	.906	.894	.900	.911	.963	.922	.922	.933	.965	.973	.933	.933

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.361	.303	.358	.367	.460	.497	.503	.547	.621	.556	.583	.592
3	.633	.614	.717	.697	.693	.717	.742	.772	.796	.743	.767	.778
4	.744	.736	.797	.806	.778	.794	.822	.833	.860	.799	.842	.850
5	.800	.786	.831	.833	.835	.833	.858	.856	.884	.855	.875	.872
6	.839	.833	.867	.872	.866	.867	.883	.883	.905	.888	.900	.900
7	.861	.867	.883	.883	.895	.883	.900	.900	.926	.888	.911	.911
8	.878	.883	.900	.900	.895	.917	.911	.928	.926	.922	.928	.928
9	.894	.900	.911	.911	.923	.917	.928	.928	.947	.922	.928	.939
10	.911	.911	.928	.928	.923	.917	.928	.928	.947	.922	.958	.956

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.353	.306	.367	.356	.453	.503	.497	.549	.612	.564	.586	.600
3	.644	.614	.711	.711	.683	.717	.747	.772	.786	.739	.786	.806
4	.750	.756	.808	.828	.783	.825	.839	.855	.839	.831	.867	.872
5	.819	.819	.861	.872	.828	.861	.906	.897	.906	.861	.922	.908
6	.861	.861	.906	.892	.878	.886	.928	.914	.926	.886	.944	.925
7	.894	.886	.928	.908	.894	.903	.944	.930	.930	.903	.953	.931
8	.911	.906	.944	.925	.911	.933	.953	.953	.950	.933	.969	.947
9	.922	.917	.953	.931	.925	.933	.969	.953	.950	.933	.969	.958
10	.942	.925	.969	.947	.942	.933	.969	.953	.970	.933	.992	.975

TABLE A-15 (75 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.957	.557	.448	.500	.000	1.000	.980	.697	.000	.000	1.000	1.000
3	1.000	.977	.706	.726	.000	1.000	1.000	.959	.000	.000	1.000	1.000
4	1.000	1.000	.891	.786	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
5	1.000	1.000	.941	.810	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
6	1.000	1.000	.977	.831	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
7	1.000	1.000	.977	.863	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
8	1.000	1.000	.995	.895	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
9	1.000	1.000	.995	.927	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
10	1.000	1.000	1.000	.927	.000	1.000	1.000	1.000	.000	.000	1.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.315	.183	.223	.244	.000	.550	.397	.359	.000	.000	.685	.526
3	.685	.479	.486	.483	.000	.812	.587	.530	.000	.000	.904	.695
4	.780	.592	.553	.550	.000	.926	.662	.618	.000	.000	.959	.786
5	.827	.633	.620	.644	.000	.965	.760	.689	.000	.000	.991	.839
6	.866	.686	.665	.736	.000	.974	.814	.764	.000	.000	1.000	.919
7	.870	.710	.726	.767	.000	.996	.864	.835	.000	.000	1.000	.968
8	.913	.760	.746	.825	.000	.996	.864	.846	.000	.000	1.000	.968
9	.913	.766	.774	.825	.000	.996	.864	.846	.000	.000	1.000	.993
10	.913	.796	.774	.825	.000	.996	.886	.846	.000	.000	1.000	.993

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.123	.086	.167	.167	.000	.318	.317	.317	.000	.000	.383	.383
3	.522	.567	.589	.656	.736	.698	.753	.794	.000	1.000	.786	.831
4	.701	.783	.864	.875	.917	.821	.869	.889	.000	1.000	.903	.908
5	.765	.856	.903	.908	1.000	.860	.903	.908	.000	1.000	.936	.942
6	.804	.881	.936	.942	1.000	.927	.936	.947	.000	1.000	.936	.947
7	.804	.922	.936	.947	1.000	.961	.969	.981	.000	1.000	.969	.981
8	.835	.922	.958	.975	1.000	.961	.969	.981	.000	1.000	.969	.981
9	.849	.956	.969	.981	1.000	.961	.969	.981	.000	1.000	.969	.981
10	.860	.956	.969	.981	1.000	.961	.969	.981	.000	1.000	.994	1.000

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.000	.053	.022	.021	.261	.281	.331	.297	.384	.639	.667
3	.747	.794	.819	.844	.904	.858	.858	.878	1.000	1.000	.900	.911
4	.817	.892	.900	.911	.959	.925	.933	.944	1.000	1.000	.967	.978
5	.911	.925	.967	.978	1.000	.958	.967	.978	1.000	1.000	.992	1.000
6	.922	.958	.967	.978	1.000	.986	.992	1.000	1.000	1.000	.992	1.000
7	.950	.986	.992	1.000	1.000	.986	.992	1.000	1.000	1.000	1.000	1.000
8	.950	.986	.992	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000
9	.967	.997	1.000	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000
10	.969	.997	1.000	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000



TABLE A-15 (75 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.061	.019	.058	.142	.569	.519	.639	.678	1.000	.887	.772	.825
3	.828	.861	.881	.892	1.000	.906	.914	.925	1.000	1.000	.947	.958
4	.917	.939	.958	.969	1.000	.972	.981	.992	1.000	1.000	.997	1.000
5	.961	.992	.997	1.000	1.000	.992	.997	1.000	1.000	1.000	1.000	1.000
6	.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	.983	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	.989	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.353	.344	.350	.544	.769	.631	.697	.711	1.000	1.000	.697	.711
3	.678	.764	.806	.789	1.000	.864	.881	.894	1.000	1.000	.914	.928
4	.889	.917	.944	.953	1.000	.964	.981	.994	1.000	1.000	.981	.994
5	.944	.975	.981	.994	1.000	.992	.997	1.000	1.000	1.000	.997	1.000
6	.967	.992	.997	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000
7	.983	.997	1.000	1.000	1.000	.997	1.000	1.000	1.000	1.000	1.000	1.000
8	.983	.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	.994	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.508	.614	.550	.669	1.000	.764	.778	.781	1.000	1.000	.778	.781
3	.733	.764	.778	.781	1.000	.764	.778	.781	1.000	1.000	.778	.781
4	.733	.764	.778	.781	1.000	.764	.778	.797	1.000	1.000	.861	.883
5	.753	.842	.861	.864	1.000	.892	.928	.931	1.000	1.000	.933	.964
6	.858	.914	.928	.931	1.000	.947	.961	.964	1.000	1.000	.994	.997
7	.900	.947	.961	.964	1.000	.981	.994	.997	1.000	1.000	.994	.997
8	.933	.981	.994	.997	1.000	.981	1.000	1.000	1.000	1.000	1.000	1.000
9	.950	.981	.994	.997	1.000	.994	1.000	1.000	1.000	1.000	1.000	1.000
10	.956	.994	1.000	1.000	1.000	.994	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.572	.672	.578	.694	1.000	.800	.811	.817	1.000	1.000	.811	.817
3	.767	.800	.811	.817	1.000	.800	.811	.817	1.000	1.000	.811	.817
4	.767	.800	.811	.817	1.000	.800	.811	.817	1.000	1.000	.811	.817
5	.767	.800	.811	.817	1.000	.800	.811	.817	1.000	1.000	.811	.817
6	.767	.800	.811	.817	1.000	.800	.811	.817	1.000	1.000	.811	.850
7	.767	.800	.811	.817	1.000	.828	.861	.900	1.000	1.000	.894	.922
8	.775	.850	.883	.872	1.000	.894	.928	.933	1.000	1.000	.928	.933
9	.822	.889	.928	.919	1.000	.917	.928	.967	1.000	1.000	.961	.967
10	.864	.917	.928	.933	1.000	.950	.961	.967	1.000	1.000	.961	.967

TABLE A-16 (75 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.445	.297	.273	.309	.000	.561	.545	.538	.000	.000	.616	.649
3	.703	.671	.578	.588	.000	.737	.766	.771	.000	.000	.734	.757
4	.818	.776	.723	.672	.000	.795	.818	.830	.000	.000	.793	.811
5	.818	.829	.798	.688	.000	.854	.870	.877	.000	.000	.852	.865
6	.876	.829	.862	.749	.000	.854	.870	.877	.000	.000	.911	.865
7	.876	.878	.879	.775	.000	.912	.870	.925	.000	.000	.911	.919
8	.933	.878	.879	.849	.000	.912	.922	.925	.000	.000	.911	.919
9	.933	.878	.922	.849	.000	.912	.922	.925	.000	.000	.911	.919
10	.933	.927	.926	.881	.000	.912	.922	.925	.000	.000	.911	.919

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.258	.195	.233	.270	.000	.411	.368	.367	.000	.000	.448	.439
3	.513	.485	.519	.532	.000	.566	.554	.586	.000	.000	.655	.690
4	.635	.630	.669	.705	.000	.731	.738	.761	.000	.000	.793	.806
5	.728	.735	.789	.827	.000	.791	.825	.844	.000	.000	.853	.856
6	.759	.791	.842	.883	.000	.849	.858	.883	.000	.000	.928	.935
7	.790	.841	.886	.905	.000	.883	.942	.933	.000	.000	.948	.949
8	.824	.841	.906	.939	.000	.900	.942	.947	.000	.000	.948	.949
9	.853	.875	.944	.950	.000	.906	.947	.947	.000	.000	.948	.949
10	.881	.891	.944	.950	.000	.906	.947	.947	.000	.000	.948	.949

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.228	.194	.233	.237	.000	.383	.367	.451	.000	.056	.500	.539
3	.560	.572	.658	.694	.527	.742	.769	.805	1.000	.802	.864	.883
4	.838	.839	.881	.886	1.000	.872	.881	.886	1.000	1.000	.914	.917
5	.883	.872	.881	.919	1.000	.906	.914	.919	1.000	1.000	.914	.917
6	.889	.906	.914	.919	1.000	.906	.917	.919	1.000	1.000	.950	.950
7	.922	.906	.917	.953	1.000	.939	.950	.953	1.000	1.000	.950	.950
8	.922	.906	.950	.953	1.000	.939	.950	.953	1.000	1.000	.950	.950
9	.922	.939	.950	.953	1.000	.939	.950	.953	1.000	1.000	.950	.950
10	.922	.939	.950	.953	1.000	.939	.950	.953	1.000	1.000	.950	.950

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.223	.200	.300	.259	.064	.433	.467	.533	.104	.319	.575	.633
3	.648	.656	.792	.833	.865	.872	.850	.850	1.000	1.000	.883	.883
4	.894	.883	.883	.886	1.000	.917	.883	.906	1.000	1.000	.917	.917
5	.927	.883	.906	.919	1.000	.917	.917	.917	1.000	1.000	.917	.917
6	.927	.917	.917	.919	1.000	.950	.917	.950	1.000	1.000	.950	.950
7	.961	.917	.917	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
8	.961	.950	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
9	.961	.950	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
10	.961	.950	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950

TABLE A-16 (75 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.241	.273	.392	.446	.391	.644	.689	.767	.785	.932	.800	.800
3	.866	.852	.850	.852	1.000	.883	.883	.883	1.000	1.000	.883	.883
4	.899	.886	.883	.886	1.000	.917	.917	.917	1.000	1.000	.917	.917
5	.933	.919	.917	.919	1.000	.917	.917	.917	1.000	1.000	.950	.917
6	.933	.919	.917	.919	1.000	.950	.950	.950	1.000	1.000	.950	.950
7	.966	.919	.942	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
8	.966	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
9	.966	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
10	.966	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.983	.950

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.306	.373	.581	.638	.830	.817	.817	.814	1.000	1.000	.839	.817
3	.855	.852	.850	.852	1.000	.883	.883	.883	1.000	1.000	.883	.883
4	.889	.886	.883	.886	1.000	.917	.917	.917	1.000	1.000	.917	.917
5	.922	.919	.917	.919	1.000	.917	.917	.917	1.000	1.000	.950	.950
6	.922	.919	.917	.919	1.000	.950	.950	.950	1.000	1.000	.950	.950
7	.955	.942	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
8	.955	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
9	.955	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.950	.950
10	.955	.953	.950	.953	1.000	.950	.950	.950	1.000	1.000	.983	.983

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.451	.499	.683	.743	.796	.813	.817	.817	1.000	1.000	.850	.850
3	.855	.852	.850	.855	1.000	.886	.883	.883	1.000	1.000	.883	.883
4	.889	.886	.883	.888	1.000	.919	.917	.917	1.000	1.000	.917	.917
5	.922	.919	.917	.922	1.000	.919	.917	.917	1.000	1.000	.950	.950
6	.922	.919	.917	.922	1.000	.953	.950	.950	1.000	1.000	.950	.950
7	.955	.942	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
8	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
9	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
10	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.983	.983

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.563	.560	.769	.777	.822	.808	.817	.817	1.000	1.000	.836	.850
3	.855	.852	.850	.855	1.000	.886	.883	.883	1.000	1.000	.883	.883
4	.889	.886	.883	.888	1.000	.919	.917	.917	1.000	1.000	.917	.917
5	.922	.919	.917	.922	1.000	.919	.917	.917	1.000	1.000	.950	.950
6	.922	.919	.917	.922	1.000	.953	.950	.950	1.000	1.000	.950	.950
7	.955	.930	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
8	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
9	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.950	.950
10	.955	.953	.950	.955	1.000	.953	.950	.950	1.000	1.000	.983	.983

TABLE A-17 (90 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.658	.000	.222	.658	.000	.761	.709	.726	.000	.000	.795	.778
3	.846	.778	.829	.846	.000	.897	.863	.880	.000	.000	.915	.897
4	.915	.880	.915	.915	.000	.949	.932	.949	.000	.000	.966	.949
5	.949	.932	.949	.949	.000	.983	.966	.983	.000	.000	.983	.983
6	.983	.949	.983	.983	.000	1.000	.983	1.000	.000	.000	1.000	1.000
7	1.000	.966	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
8	1.000	.983	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
9	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
10	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.608	.000	.217	.608	.000	.692	.642	.675	.000	.000	.742	.725
3	.792	.725	.775	.792	.148	.825	.808	.825	.222	.296	.858	.842
4	.858	.825	.858	.858	.370	.875	.875	.875	.444	.519	.892	.892
5	.892	.858	.892	.892	.519	.908	.908	.908	.593	.593	.925	.925
6	.925	.892	.908	.925	.667	.925	.925	.925	.667	.741	.942	.942
7	.942	.908	.925	.942	.741	.942	.942	.942	.741	.741	.958	.958
8	.942	.925	.942	.942	.741	.958	.958	.958	.741	.815	.958	.958
9	.958	.942	.958	.958	.815	.958	.958	.958	.815	.815	.975	.975
10	.958	.942	.958	.958	.815	.975	.958	.975	.815	.889	.975	.975

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.592	.000	.233	.592	.085	.675	.658	.658	.213	.255	.725	.708
3	.775	.758	.758	.775	.468	.808	.792	.808	.511	.553	.825	.825
4	.842	.825	.825	.842	.638	.858	.858	.858	.638	.681	.875	.875
5	.875	.858	.875	.875	.723	.892	.892	.892	.723	.766	.908	.908
6	.892	.892	.892	.892	.766	.908	.908	.908	.766	.809	.925	.925
7	.908	.908	.908	.908	.809	.925	.925	.925	.809	.809	.942	.925
8	.925	.908	.925	.925	.809	.942	.925	.942	.851	.851	.942	.942
9	.942	.925	.942	.942	.851	.942	.942	.942	.851	.851	.958	.942
10	.942	.925	.942	.942	.851	.958	.942	.958	.894	.894	.958	.958

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.575	.017	.283	.575	.237	.658	.642	.658	.373	.373	.708	.708
3	.758	.742	.758	.758	.576	.792	.792	.792	.610	.644	.825	.825
4	.825	.825	.825	.825	.678	.858	.842	.858	.712	.746	.875	.875
5	.875	.858	.858	.875	.746	.892	.875	.892	.780	.780	.908	.892
6	.892	.892	.892	.892	.814	.908	.908	.908	.814	.814	.925	.925
7	.908	.908	.908	.908	.847	.925	.925	.925	.847	.847	.942	.925
8	.925	.908	.925	.925	.847	.942	.925	.942	.881	.881	.942	.942
9	.942	.925	.925	.942	.881	.942	.942	.942	.881	.881	.958	.942
10	.942	.925	.942	.942	.881	.958	.942	.958	.881	.915	.958	.958

TABLE A-17 (90 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.575	.150	.467	.575	.427	.692	.642	.658	.507	.533	.742	.708
3	.792	.742	.775	.792	.693	.842	.808	.825	.720	.747	.858	.842
4	.875	.825	.858	.875	.800	.892	.875	.892	.800	.827	.908	.908
5	.908	.875	.908	.908	.853	.925	.908	.925	.853	.880	.942	.942
6	.925	.908	.925	.925	.880	.942	.942	.942	.907	.907	.958	.958
7	.942	.925	.942	.942	.907	.958	.958	.958	.933	.933	.975	.975
8	.958	.942	.958	.958	.933	.975	.975	.975	.933	.960	.975	.975
9	.975	.958	.975	.975	.960	.975	.975	.975	.960	.987	.992	.992
10	.975	.958	.975	.975	.960	.992	.992	.992	.987	.987	.992	.992

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.625	.250	.558	.625	.562	.725	.658	.692	.607	.652	.775	.758
3	.825	.758	.808	.825	.787	.875	.842	.875	.787	.831	.892	.892
4	.908	.858	.892	.908	.876	.925	.908	.925	.876	.921	.958	.942
5	.942	.908	.942	.942	.921	.958	.958	.958	.921	.966	.975	.975
6	.975	.942	.958	.975	.966	.992	.975	.992	.989	.989	.992	.992
7	.992	.958	.992	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	.992	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.658	.333	.575	.658	.626	.758	.692	.725	.667	.727	.808	.792
3	.875	.792	.858	.875	.848	.908	.892	.908	.848	.889	.942	.925
4	.942	.892	.942	.942	.949	.975	.958	.975	.949	.970	.992	.975
5	.992	.942	.975	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.675	.350	.592	.675	.660	.775	.708	.742	.699	.757	.825	.808
3	.892	.808	.875	.892	.874	.925	.908	.925	.893	.932	.958	.942
4	.958	.908	.958	.958	.971	.992	.975	.992	1.000	1.000	1.000	1.000
5	1.000	.992	.992	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE A-18 (90 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.383	.003	.117	.397	.000	.517	.450	.497	.000	.000	.600	.597
3	.700	.571	.633	.719	.000	.750	.717	.769	.000	.400	.817	.792
4	.817	.738	.767	.819	1.000	.842	.825	.856	1.000	1.000	.858	.878
5	.858	.819	.825	.878	1.000	.875	.875	.878	1.000	1.000	.892	.900
6	.892	.861	.858	.900	1.000	.908	.892	.900	1.000	1.000	.908	.922
7	.908	.877	.875	.922	1.000	.908	.908	.922	1.000	1.000	.925	.922
8	.908	.894	.892	.922	1.000	.925	.925	.922	1.000	1.000	.942	.944
9	.925	.911	.908	.922	1.000	.942	.925	.944	1.000	1.000	.942	.944
10	.925	.911	.925	.944	1.000	.942	.942	.944	1.000	1.000	.942	.944

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.383	.068	.117	.473	.242	.500	.433	.467	.303	.424	.600	.567
3	.683	.641	.600	.766	.667	.750	.700	.717	.667	.788	.783	.750
4	.783	.786	.750	.847	.848	.833	.800	.817	.909	.909	.867	.850
5	.867	.864	.817	.934	1.000	.892	.875	.875	1.000	1.000	.892	.892
6	.892	.908	.875	.961	1.000	.908	.892	.892	1.000	1.000	.908	.908
7	.908	.953	.892	.979	1.000	.925	.908	.908	1.000	1.000	.925	.925
8	.925	.953	.908	.997	1.000	.925	.925	.925	1.000	1.000	.942	.925
9	.925	.970	.908	.997	1.000	.942	.925	.942	1.000	1.000	.942	.942
10	.942	.988	.925	1.000	1.000	.942	.942	.942	1.000	1.000	.942	.942

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.367	.188	.117	.560	.449	.517	.417	.450	.490	.571	.583	.550
3	.667	.672	.600	.867	.735	.733	.700	.700	.735	.816	.767	.750
4	.783	.819	.750	.980	.857	.817	.783	.817	.857	.898	.850	.850
5	.850	.897	.817	1.044	.939	.883	.850	.867	.939	.980	.900	.883
6	.883	.959	.867	1.000	1.000	.908	.892	.908	1.000	1.000	.925	.908
7	.908	.994	.892	1.000	1.000	.925	.908	.908	1.000	1.000	.925	.925
8	.925	1.000	.908	1.000	1.000	.925	.925	.925	1.000	1.000	.942	.942
9	.925	1.000	.908	1.000	1.000	.942	.925	.942	1.000	1.000	.942	.942
10	.942	1.000	.925	1.000	1.000	.942	.942	.942	1.000	1.000	.958	.942

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.367	.225	.133	.569	.508	.500	.417	.467	.576	.610	.583	.550
3	.650	.652	.583	.841	.746	.717	.683	.700	.780	.814	.767	.733
4	.767	.781	.733	.973	.847	.800	.783	.800	.847	.881	.833	.833
5	.833	.859	.800	1.000	.915	.867	.833	.867	.915	.949	.883	.867
6	.867	.913	.850	1.000	.949	.900	.883	.900	.949	.983	.917	.900
7	.900	.946	.883	1.000	.983	.917	.900	.917	1.000	1.000	.925	.925
8	.917	.964	.900	1.000	1.000	.925	.925	.925	1.000	1.000	.942	.942
9	.925	.973	.925	1.000	1.000	.942	.942	.942	1.000	1.000	.942	.942
10	.942	.991	.925	1.000	1.000	.942	.942	.942	1.000	1.000	.958	.942

TABLE A-18 (90 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.350	.245	.217	.521	.575	.483	.417	.450	.630	.658	.550	.517
3	.633	.573	.567	.795	.767	.700	.667	.683	.767	.795	.733	.717
4	.733	.729	.700	.886	.822	.783	.767	.767	.849	.877	.817	.800
5	.800	.810	.783	.937	.877	.833	.817	.833	.877	.904	.850	.850
6	.850	.853	.817	.981	.904	.867	.850	.867	.904	.932	.883	.883
7	.867	.882	.850	1.000	.932	.883	.883	.883	.932	.932	.917	.900
8	.883	.911	.867	1.000	.932	.917	.900	.900	.932	.959	.917	.917
9	.917	.928	.900	1.000	.959	.917	.917	.917	.959	.959	.933	.933
10	.917	.942	.900	1.000	.959	.933	.917	.933	.959	.986	.950	.950

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.383	.233	.300	.383	.588	.467	.417	.433	.635	.659	.533	.500
3	.617	.500	.550	.617	.753	.667	.633	.667	.776	.800	.717	.700
4	.717	.650	.683	.717	.824	.750	.733	.750	.847	.847	.783	.783
5	.783	.717	.750	.783	.871	.817	.800	.800	.871	.871	.833	.817
6	.817	.783	.800	.817	.894	.850	.833	.833	.894	.894	.850	.850
7	.850	.817	.833	.850	.894	.867	.850	.867	.918	.918	.883	.883
8	.867	.833	.833	.867	.918	.883	.883	.883	.918	.918	.883	.883
9	.883	.850	.867	.883	.918	.883	.883	.883	.941	.941	.917	.900
10	.883	.867	.883	.883	.941	.917	.900	.900	.941	.941	.917	.917

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.417	.186	.283	.478	.602	.500	.450	.467	.667	.688	.550	.533
3	.633	.582	.583	.704	.774	.700	.650	.667	.796	.817	.733	.717
4	.733	.719	.717	.809	.860	.800	.767	.783	.860	.882	.817	.800
5	.800	.822	.783	.867	.903	.833	.817	.833	.903	.903	.867	.850
6	.850	.857	.817	.901	.925	.867	.850	.867	.925	.925	.883	.883
7	.867	.883	.850	.919	.946	.900	.883	.883	.946	.946	.917	.900
8	.900	.914	.883	.948	.946	.917	.900	.917	.946	.968	.917	.917
9	.917	.920	.883	.962	.968	.917	.917	.917	.968	.968	.933	.933
10	.917	.937	.917	.962	.968	.933	.933	.933	.968	.968	.950	.950

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.450	.162	.250	.568	.639	.550	.500	.517	.680	.701	.600	.567
3	.667	.647	.617	.793	.804	.717	.667	.700	.825	.845	.750	.733
4	.767	.766	.733	.874	.887	.817	.783	.800	.887	.907	.850	.817
5	.817	.850	.800	.916	.907	.850	.850	.850	.907	.928	.883	.867
6	.867	.882	.833	.958	.948	.883	.883	.883	.948	.948	.917	.900
7	.883	.908	.867	.976	.969	.917	.900	.917	.969	.969	.933	.917
8	.917	.942	.900	.994	.969	.933	.917	.933	.969	.990	.950	.933
9	.933	.945	.900	1.000	.990	.950	.933	.933	.990	.990	.950	.950
10	.933	.962	.933	1.000	.990	.950	.950	.950	1.000	1.000	.958	.958

TABLE A-19 (90 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.436	.000	.000	.436	.000	.641	.538	.590	.000	.000	.692	.692
3	.795	.692	.744	.795	.000	.846	.795	.846	.000	.000	.897	.846
4	.897	.846	.897	.897	.000	.949	.897	.949	.000	.000	.949	.949
5	.949	.897	.949	.949	.000	1.000	.949	1.000	.000	.000	1.000	1.000
6	1.000	.949	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
7	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
8	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
9	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000
10	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000	.000	.000	1.000	1.000

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.164	.000	.000	.164	.000	.345	.236	.273	.000	.000	.382	.382
3	.455	.382	.455	.455	.000	.491	.491	.491	.000	.000	.564	.527
4	.564	.491	.564	.564	.000	.636	.600	.636	.000	.000	.673	.673
5	.673	.600	.673	.673	.000	.709	.673	.709	.000	.000	.745	.745
6	.745	.673	.709	.745	.000	.782	.745	.782	.000	.000	.782	.782
7	.782	.709	.745	.782	.000	.782	.782	.782	.000	.000	.818	.818
8	.782	.745	.782	.782	.000	.818	.818	.818	.000	.000	.855	.855
9	.818	.782	.818	.818	.000	.855	.818	.855	.000	.000	.855	.855
10	.855	.818	.818	.855	.000	.855	.855	.855	.000	.000	.891	.855

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.000	.000	.000	.000	.000	.283	.150	.183	.400	1.000	.400	.367
3	.467	.367	.433	.467	1.000	.533	.467	.533	1.000	1.000	.600	.533
4	.600	.500	.600	.600	1.000	.667	.600	.667	1.000	1.000	.700	.667
5	.667	.600	.667	.667	1.000	.733	.733	.733	1.000	1.000	.733	.733
6	.733	.667	.733	.733	1.000	.800	.733	.800	1.000	1.000	.800	.800
7	.800	.733	.800	.800	1.000	.800	.800	.800	1.000	1.000	.833	.800
8	.800	.767	.800	.800	1.000	.867	.800	.867	1.000	1.000	.867	.867
9	.800	.800	.800	.800	1.000	.867	.867	.867	1.000	1.000	.867	.867
10	.867	.800	.867	.867	1.000	.867	.867	.867	1.000	1.000	.867	.867

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.033	.000	.000	.033	.545	.317	.100	.217	1.000	1.000	.433	.400
3	.500	.400	.467	.500	1.000	.533	.533	.533	1.000	1.000	.567	.567
4	.600	.533	.567	.600	1.000	.633	.600	.633	1.000	1.000	.700	.667
5	.667	.600	.667	.667	1.000	.733	.700	.733	1.000	1.000	.767	.733
6	.733	.667	.733	.733	1.000	.767	.767	.767	1.000	1.000	.800	.800
7	.767	.733	.767	.767	1.000	.800	.800	.800	1.000	1.000	.833	.833
8	.800	.767	.800	.800	1.000	.833	.833	.833	1.000	1.000	.833	.833
9	.833	.800	.833	.833	1.000	.833	.833	.833	1.000	1.000	.867	.867
10	.833	.800	.833	.833	1.000	.867	.867	.867	1.000	1.000	.867	.867



TABLE A-19 (90 DEG, 60 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.233	.000	.033	.233	1.000	.317	.300	.317	1.000	1.000	.317	.317
3	.467	.317	.433	.467	1.000	.533	.500	.533	1.000	1.000	.600	.567
4	.600	.533	.567	.600	1.000	.633	.600	.633	1.000	1.000	.667	.633
5	.667	.600	.633	.667	1.000	.700	.667	.700	1.000	1.000	.733	.733
6	.733	.633	.700	.733	1.000	.733	.733	.733	1.000	1.000	.800	.767
7	.767	.700	.733	.767	1.000	.800	.767	.800	1.000	1.000	.800	.800
8	.800	.733	.800	.800	1.000	.800	.800	.800	1.000	1.000	.833	.833
9	.800	.767	.800	.800	1.000	.833	.800	.833	1.000	1.000	.867	.867
10	.833	.800	.833	.833	1.000	.867	.833	.867	1.000	1.000	.867	.867

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.417	.000	.200	.417	1.000	.417	.417	.417	1.000	1.000	.417	.417
3	.417	.417	.417	.417	1.000	.417	.417	.417	1.000	1.000	.417	.417
4	.417	.417	.417	.417	1.000	.533	.500	.533	1.000	1.000	.600	.567
5	.567	.433	.567	.567	1.000	.667	.600	.667	1.000	1.000	.667	.667
6	.667	.567	.667	.667	1.000	.700	.667	.700	1.000	1.000	.733	.733
7	.700	.667	.700	.700	1.000	.767	.733	.767	1.000	1.000	.767	.767
8	.767	.700	.733	.767	1.000	.767	.767	.767	1.000	1.000	.833	.800
9	.767	.733	.767	.767	1.000	.833	.800	.833	1.000	1.000	.833	.833
10	.800	.767	.800	.800	1.000	.833	.833	.833	1.000	1.000	.833	.833

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.517	.283	.367	.517	1.000	.517	.517	.517	1.000	1.000	.517	.517
3	.517	.517	.517	.517	1.000	.517	.517	.517	1.000	1.000	.517	.517
4	.517	.517	.517	.517	1.000	.517	.517	.517	1.000	1.000	.517	.517
5	.517	.517	.517	.517	1.000	.550	.550	.550	1.000	1.000	.583	.550
6	.550	.517	.550	.550	1.000	.583	.583	.583	1.000	1.000	.617	.583
7	.583	.550	.583	.583	1.000	.617	.583	.617	1.000	1.000	.617	.617
8	.617	.583	.617	.617	1.000	.617	.617	.617	1.000	1.000	.650	.650
9	.617	.583	.617	.617	1.000	.650	.617	.650	1.000	1.000	.733	.700
10	.650	.617	.617	.650	1.000	.700	.650	.700	1.000	1.000	.733	.733

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.550	.483	.500	.550	1.000	.550	.550	.550	1.000	1.000	.550	.550
3	.550	.550	.550	.550	1.000	.550	.550	.550	1.000	1.000	.550	.550
4	.550	.550	.550	.550	1.000	.583	.550	.583	1.000	1.000	.617	.583
5	.583	.550	.583	.583	1.000	.617	.617	.617	1.000	1.000	.650	.650
6	.650	.583	.617	.650	1.000	.650	.650	.650	1.000	1.000	.683	.683
7	.650	.617	.650	.650	1.000	.683	.683	.683	1.000	1.000	.717	.717
8	.683	.650	.683	.683	1.000	.717	.683	.717	1.000	1.000	.717	.717
9	.717	.683	.717	.717	1.000	.717	.717	.717	1.000	1.000	.750	.750
10	.717	.683	.717	.717	1.000	.750	.717	.750	1.000	1.000	.750	.750

TABLE A-20 (90 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.367	.000	.122	.367	.000	.490	.408	.449	.000	.000	.571	.531
3	.653	.531	.612	.653	.000	.694	.694	.694	.000	.000	.776	.776
4	.776	.694	.735	.776	.000	.816	.776	.776	.000	.000	.857	.857
5	.857	.776	.816	.857	.000	.857	.857	.857	.000	.000	.857	.857
6	.857	.857	.857	.857	.000	.939	.857	.898	.000	.000	.939	.939
7	.939	.857	.898	.939	.000	.939	.939	.939	.000	.000	.939	.939
8	.939	.898	.939	.939	.000	.939	.939	.939	.000	.000	.939	.939
9	.939	.939	.939	.939	.000	.939	.939	.939	.000	.000	.939	.939
10	.939	.939	.939	.939	.000	.939	.939	.939	.000	.000	.939	.939

## 500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.267	.000	.100	.270	.000	.400	.333	.333	.000	.000	.433	.400
3	.500	.400	.433	.504	.000	.567	.533	.533	1.000	1.000	.583	.583
4	.583	.533	.583	.585	1.000	.683	.617	.683	1.000	1.000	.683	.683
5	.683	.617	.683	.685	1.000	.717	.683	.717	1.000	1.000	.783	.783
6	.783	.683	.717	.786	1.000	.783	.783	.783	1.000	1.000	.817	.783
7	.783	.717	.750	.786	1.000	.817	.783	.817	1.000	1.000	.817	.817
8	.817	.783	.817	.819	1.000	.817	.817	.817	1.000	1.000	.850	.850
9	.817	.783	.817	.819	1.000	.850	.850	.850	1.000	1.000	.850	.850
10	.850	.817	.850	.852	1.000	.850	.850	.850	1.000	1.000	.883	.883

## 750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.267	.040	.100	.307	.000	.400	.300	.333	.000	.222	.533	.433
3	.633	.468	.567	.656	1.000	.683	.650	.683	1.000	1.000	.717	.683
4	.717	.676	.683	.739	1.000	.750	.750	.750	1.000	1.000	.750	.750
5	.750	.746	.750	.774	1.000	.817	.750	.783	1.000	1.000	.817	.817
6	.817	.780	.783	.842	1.000	.817	.817	.817	1.000	1.000	.817	.817
7	.817	.850	.817	.842	1.000	.817	.817	.817	1.000	1.000	.850	.817
8	.817	.850	.817	.842	1.000	.850	.817	.850	1.000	1.000	.850	.850
9	.850	.850	.817	.877	1.000	.850	.850	.850	1.000	1.000	.883	.883
10	.850	.850	.850	.877	1.000	.883	.850	.883	1.000	1.000	.883	.883

## 1000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.300	.050	.067	.379	.308	.367	.367	.433	.462	.286	.567	.567
3	.683	.499	.650	.734	1.000	.617	.683	.717	1.000	1.000	.750	.750
4	.750	.612	.717	.806	1.000	.683	.783	.783	1.000	1.000	.817	.783
5	.783	.682	.783	.842	1.000	.783	.817	.850	1.000	1.000	.850	.850
6	.850	.717	.817	.913	1.000	.783	.850	.850	1.000	1.000	.850	.850
7	.850	.787	.850	.913	1.000	.783	.850	.850	1.000	1.000	.883	.883
8	.850	.822	.850	.913	1.000	.850	.883	.883	1.000	1.000	.917	.883
9	.883	.822	.883	.949	1.000	.883	.883	.883	1.000	1.000	.917	.917
10	.883	.822	.883	.949	1.000	.883	.917	.917	1.000	1.000	.917	.917

TABLE A20 (90 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.467	.193	.100	.522	.762	.638	.533	.600	1.000	1.000	.717	.717
3	.750	.801	.750	.833	1.000	.819	.783	.817	1.000	1.000	.817	.817
4	.817	.913	.817	.907	1.000	.886	.850	.850	1.000	1.000	.883	.883
5	.883	.950	.850	.981	1.000	.919	.883	.917	1.000	1.000	.917	.917
6	.917	.988	.917	1.000	1.000	.919	.917	.917	1.000	1.000	.917	.917
7	.917	1.000	.917	1.000	1.000	.919	.917	.917	1.000	1.000	.983	.983
8	.917	1.000	.917	1.000	1.000	.986	.950	.983	1.000	1.000	.983	.983
9	.983	1.000	.950	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983
10	.983	1.000	.950	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983

## 2000 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.567	.340	.333	.645	1.000	.719	.683	.717	1.000	1.000	.750	.750
3	.817	.841	.783	.925	1.000	.852	.817	.850	1.000	1.000	.883	.883
4	.883	.953	.850	1.000	1.000	.919	.917	.917	1.000	1.000	.917	.917
5	.917	1.000	.917	1.000	1.000	.953	.917	.950	1.000	1.000	.950	.950
6	.950	1.000	.950	1.000	1.000	.953	.950	.950	1.000	1.000	.983	.983
7	.950	1.000	.950	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983
8	.983	1.000	.950	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983
9	.983	1.000	.983	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983
10	.983	1.000	.983	1.000	1.000	.986	.983	.983	1.000	1.000	.983	.983

## 2500 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.667	.403	.500	.772	1.000	.750	.717	.750	1.000	1.000	.783	.783
3	.850	.868	.817	.981	1.000	.883	.850	.850	1.000	1.000	.883	.883
4	.883	.942	.883	1.000	1.000	.917	.883	.917	1.000	1.000	.917	.917
5	.917	.978	.917	1.000	1.000	.950	.917	.950	1.000	1.000	.983	.950
6	.950	1.000	.917	1.000	1.000	.983	.983	.983	1.000	1.000	.983	.983
7	.983	1.000	.983	1.000	1.000	.983	.983	.983	1.000	1.000	.983	.983
8	.983	1.000	.983	1.000	1.000	.983	.983	.983	1.000	1.000	.983	.983
9	.983	1.000	.983	1.000	1.000	.983	.983	.983	1.000	1.000	.983	.983
10	.983	1.000	.983	1.000	1.000	.983	.983	.983	1.000	1.000	.983	.983

## 2750 KILOMETERS

PDOP	3 OBS CONST				4 OBS CONST				5 OBS CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2	.683	.455	.801	.600	1.000	.752	.750	.750	1.000	1.000	.783	.783
3	.850	.884	.997	.783	1.000	.852	.850	.850	1.000	1.000	.883	.883
4	.883	.959	1.000	.883	1.000	.886	.883	.883	1.000	1.000	.950	.950
5	.950	.997	1.000	.917	1.000	.953	.950	.950	1.000	1.000	.950	.950
6	.950	1.000	1.000	.950	1.000	.953	.950	.950	1.000	1.000	.983	.983
7	.950	1.000	1.000	.950	1.000	.986	.983	.983	1.000	1.000	.983	.983
8	.983	1.000	1.000	.983	1.000	.986	.983	.983	1.000	1.000	.983	.983
9	.983	1.000	1.000	.983	1.000	.986	.983	.983	1.000	1.000	.983	.983
10	.983	1.000	1.000	.983	1.000	.986	.983	.983	1.000	1.000	.983	.983

## **APPENDIX B.**

### **Cumulative Probability Tables of Shortest Target Tracker to Target Distances**

Tabular entries are cumulative probability values of shortest distances to target. The values in parentheses in each of the tables define the latitude of the target, the inclination of the orbital lane, and the satellite period. The data is organized by target elevation, by shortest, second shortest, and third shortest distances and by constellation number. CONST=1, 2, 3, or 4 corresponds to 9, 12, 15, or 18 satellites.

TABLE B-1 (30 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.075	.096	.076	.144	.000	.000	.014	.000	.000	.000	.000	.000
11.5	.410	.594	.592	.675	.126	.086	.278	.306	.000	.000	.000	.036
12.5	.821	.961	1.000	1.000	.299	.521	.669	.771	.000	.022	.124	.486
13.5	1.000	1.000	1.000	1.000	.522	.799	.940	1.000	.000	.270	.529	.829
14.5	1.000	1.000	1.000	1.000	.935	.976	1.000	1.000	.469	.787	.989	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.207	.282	.254	.396	.017	.000	.107	.025	.000	.000	.000	.000
11.5	.590	.774	.844	.904	.174	.235	.390	.418	.000	.000	.011	.190
12.5	.865	.997	1.000	1.000	.353	.572	.758	.846	.000	.069	.215	.571
13.5	1.000	1.000	1.000	1.000	.579	.824	.957	1.000	.000	.301	.594	.868
14.5	1.000	1.000	1.000	1.000	.958	.982	1.000	1.000	.263	.774	.993	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.791	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.264	.406	.367	.518	.054	.000	.160	.093	.000	.000	.000	.000
11.5	.653	.840	.894	.963	.190	.290	.453	.488	.000	.000	.032	.242
12.5	.885	1.000	1.000	1.000	.375	.610	.789	.879	.000	.089	.247	.597
13.5	1.000	1.000	1.000	1.000	.610	.836	.967	1.000	.000	.329	.622	.883
14.5	1.000	1.000	1.000	1.000	.967	.986	1.000	1.000	.194	.788	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.564	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.688	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.996	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.065	.083	.067	.125	.000	.000	.007	.000	.000	.000	.000	.000
10.5	.296	.501	.435	.588	.089	.000	.217	.165	.000	.000	.000	.000
11.5	.707	.882	.932	.983	.203	.340	.500	.567	.000	.000	.044	.282
12.5	.900	1.000	1.000	1.000	.394	.639	.814	.904	.000	.107	.278	.619
13.5	1.000	1.000	1.000	1.000	.642	.844	.974	1.000	.004	.383	.646	.900
14.5	1.000	1.000	1.000	1.000	.974	.990	1.000	1.000	.197	.793	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.558	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.686	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.986	1.000	1.000	1.000

TABLE B-2 (30 DEG. 90 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.000	.000	.081	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.5	.411	.278	.442	.419	.000	.261	.178	.397	.000	.000	.000	.000
12.5	.633	.583	.639	.633	.173	.492	.533	.619	.000	.003	.258	.258
13.5	.814	.797	.817	.814	.588	.728	.742	.808	.000	.203	.639	.656
14.5	.975	.975	.975	.975	.848	.956	.956	.975	.474	.552	.919	.925
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.233	.156	.286	.242	.000	.144	.000	.225	.000	.000	.000	.000
11.5	.486	.325	.508	.492	.000	.311	.342	.472	.000	.000	.022	.000
12.5	.678	.642	.681	.678	.272	.556	.586	.664	.000	.056	.356	.389
13.5	.833	.819	.836	.833	.567	.756	.769	.828	.000	.203	.681	.694
14.5	.986	.981	.986	.986	.781	.975	.969	.986	.269	.522	.944	.944
15.5	1.000	1.000	1.000	1.000	.981	1.000	1.000	1.000	.764	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.303	.203	.342	.311	.000	.189	.050	.292	.000	.000	.000	.000
11.5	.522	.347	.536	.531	.000	.328	.392	.503	.000	.000	.047	.000
12.5	.694	.661	.697	.694	.319	.581	.606	.681	.000	.081	.386	.433
13.5	.850	.836	.850	.850	.581	.769	.786	.844	.000	.211	.694	.714
14.5	.992	.992	.992	.992	.781	.981	.975	.992	.278	.528	.958	.947
15.5	1.000	1.000	1.000	1.000	.981	1.000	1.000	1.000	.758	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
9.5	.000	.000	.069	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.347	.233	.381	.356	.000	.217	.094	.333	.000	.000	.000	.000
11.5	.550	.408	.561	.556	.000	.344	.431	.531	.000	.000	.064	.044
12.5	.711	.681	.714	.711	.353	.600	.622	.700	.000	.100	.414	.464
13.5	.853	.844	.853	.853	.592	.775	.789	.850	.000	.217	.717	.728
14.5	.992	.992	.992	.992	.786	.981	.983	.992	.286	.581	.967	.947
15.5	1.000	1.000	1.000	1.000	.978	1.000	1.000	1.000	.756	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-3 (30 DEG. 60 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.117	.114	.100	.150	.000	.000	.028	.000	.000	.000	.000	.000
5.5	.444	.478	.475	.569	.188	.073	.275	.247	.000	.000	.000	.000
6.5	.749	.883	.942	.986	.545	.436	.572	.593	.000	.000	.018	.370
7.5	.932	1.000	1.000	1.000	.880	.868	.911	.947	.000	.588	.652	.833
8.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.239	.236	.228	.314	.017	.020	.111	.056	.000	.000	.000	.000
5.5	.517	.592	.608	.711	.154	.101	.306	.342	.000	.000	.000	.011
6.5	.756	.908	.975	1.000	.326	.377	.558	.622	.000	.000	.040	.336
7.5	.919	1.000	1.000	1.000	.494	.679	.836	.944	.000	.212	.319	.656
8.5	1.000	1.000	1.000	1.000	.782	.888	.989	1.000	.081	.599	.757	.917
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.019	.019	.028	.033	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.300	.303	.292	.389	.033	.031	.139	.103	.000	.000	.000	.000
5.5	.556	.625	.650	.736	.164	.131	.331	.386	.000	.000	.000	.053
6.5	.764	.925	.986	1.000	.331	.394	.575	.653	.000	.000	.061	.361
7.5	.919	1.000	1.000	1.000	.481	.681	.842	.944	.000	.181	.322	.658
8.5	1.000	1.000	1.000	1.000	.744	.883	.989	1.000	.018	.497	.739	.917
9.5	1.000	1.000	1.000	1.000	.989	1.000	1.000	1.000	.310	.914	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.078	.081	.047	.103	.000	.000	.014	.000	.000	.000	.000	.000
4.5	.333	.350	.331	.431	.053	.039	.158	.142	.000	.000	.000	.000
5.5	.572	.639	.686	.756	.178	.158	.344	.403	.000	.000	.000	.083
6.5	.767	.928	.989	1.000	.333	.403	.586	.658	.000	.000	.072	.372
7.5	.919	1.000	1.000	1.000	.481	.681	.842	.944	.000	.181	.325	.658
8.5	1.000	1.000	1.000	1.000	.736	.883	.989	1.000	.008	.492	.725	.917
9.5	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.199	.900	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.780	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-4 (30 DEG. 90 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.079	.040	.169	.078	.000	.043	.000	.079	.000	.000	.000	.000
5.5	.418	.279	.504	.436	.000	.273	.170	.412	.000	.000	.000	.000
6.5	.704	.576	.725	.720	.156	.557	.606	.697	.000	.000	.179	.118
7.5	.936	.920	.937	.943	.727	.897	.900	.928	.000	.447	.749	.680
8.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.195	.121	.257	.201	.000	.110	.006	.186	.000	.000	.000	.000
5.5	.393	.297	.444	.412	.024	.254	.192	.387	.000	.000	.000	.020
6.5	.585	.492	.610	.599	.115	.424	.475	.576	.000	.000	.136	.113
7.5	.746	.720	.754	.751	.402	.658	.669	.740	.000	.083	.477	.395
8.5	.893	.887	.898	.898	.773	.845	.833	.887	.299	.465	.767	.816
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.028	.014	.022	.028	.000	.014	.000	.025	.000	.000	.000	.000
4.5	.225	.136	.289	.228	.000	.131	.025	.219	.000	.000	.000	.000
5.5	.417	.317	.461	.433	.028	.275	.219	.414	.000	.000	.000	.028
6.5	.586	.500	.606	.600	.103	.428	.481	.575	.000	.000	.142	.128
7.5	.733	.711	.742	.739	.320	.647	.658	.728	.000	.064	.469	.392
8.5	.878	.872	.883	.883	.607	.828	.814	.872	.147	.336	.744	.797
9.5	1.000	1.000	1.000	1.000	.864	1.000	1.000	1.000	.601	.843	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.5	.050	.025	.089	.050	.000	.025	.000	.050	.000	.000	.000	.000
4.5	.250	.153	.314	.256	.000	.144	.033	.244	.000	.000	.000	.000
5.5	.425	.331	.469	.442	.033	.286	.247	.419	.000	.000	.000	.033
6.5	.589	.508	.606	.600	.108	.433	.494	.581	.000	.000	.147	.139
7.5	.736	.714	.742	.742	.322	.647	.658	.728	.000	.064	.475	.392
8.5	.878	.872	.883	.883	.606	.828	.808	.872	.113	.319	.739	.797
9.5	1.000	1.000	1.000	1.000	.844	1.000	1.000	1.000	.462	.787	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.850	.972	1.000	1.000
11.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000



TABLE B-5 (45 DEG. 60 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.067	.065	.119	.099	.000	.000	.000	.000	.000	.000	.000	.000
11.5	.611	.854	.971	1.000	.029	.007	.140	.282	.000	.000	.000	.007
12.5	.993	1.000	1.000	1.000	.178	.499	.785	.981	.000	.048	.064	.336
13.5	1.000	1.000	1.000	1.000	.554	.849	1.000	1.000	.103	.273	.550	.825
14.5	1.000	1.000	1.000	1.000	.919	1.000	1.000	1.000	.670	.823	.949	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.374	.511	.619	.767	.000	.000	.000	.000	.000	.000	.000	.000
11.5	.775	.999	.985	1.000	.069	.119	.379	.575	.000	.000	.000	.094
12.5	1.000	1.000	1.000	1.000	.264	.586	.885	1.000	.000	.079	.174	.482
13.5	1.000	1.000	1.000	1.000	.614	.894	1.000	1.000	.041	.313	.615	.886
14.5	1.000	1.000	1.000	1.000	.933	1.000	1.000	1.000	.238	.790	.971	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.559	.994	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.999	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.460	.629	.757	.929	.000	.000	.014	.014	.000	.000	.000	.000
11.5	.835	1.000	1.000	1.000	.085	.218	.483	.682	.000	.000	.000	.142
12.5	1.000	1.000	1.000	1.000	.307	.625	.924	1.000	.000	.094	.203	.542
13.5	1.000	1.000	1.000	1.000	.632	.906	1.000	1.000	.042	.332	.638	.907
14.5	1.000	1.000	1.000	1.000	.946	1.000	1.000	1.000	.228	.806	.975	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.529	.993	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.938	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.044	.042	.096	.065	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.521	.715	.899	.988	.001	.000	.032	.086	.000	.000	.000	.000
11.5	.881	1.000	1.000	1.000	.100	.301	.572	.769	.000	.000	.006	.179
12.5	1.000	1.000	1.000	1.000	.339	.657	.951	1.000	.000	.106	.224	.588
13.5	1.000	1.000	1.000	1.000	.651	.918	1.000	1.000	.058	.364	.663	.922
14.5	1.000	1.000	1.000	1.000	.949	1.000	1.000	1.000	.231	.813	.979	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.526	.992	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.915	1.000	1.000	1.000

TABLE 8-5 (45 DEG. 60 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.310	.418	.506	.631	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.636	.882	.972	1.000	.036	.015	.165	.322	.000	.000	.000	.022
11.5	.954	1.000	1.000	1.000	.122	.411	.689	.901	.000	.014	.026	.233
12.5	1.000	1.000	1.000	1.000	.393	.708	.979	1.000	.000	.124	.300	.660
13.5	1.000	1.000	1.000	1.000	.683	.946	1.000	1.000	.104	.431	.715	.951
14.5	1.000	1.000	1.000	1.000	.957	1.000	1.000	1.000	.236	.828	.983	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.513	.992	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.856	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.004	.000	.065	.004	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.450	.615	.746	.915	.000	.000	.011	.008	.000	.000	.000	.000
10.5	.732	.979	.982	1.000	.061	.067	.308	.503	.000	.000	.000	.056
11.5	.990	1.000	1.000	1.000	.157	.478	.761	.975	.000	.039	.049	.299
12.5	1.000	1.000	1.000	1.000	.426	.738	.992	1.000	.000	.136	.361	.703
13.5	1.000	1.000	1.000	1.000	.704	.958	1.000	1.000	.121	.451	.743	.964
14.5	1.000	1.000	1.000	1.000	.958	1.000	1.000	1.000	.236	.832	.989	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.494	.985	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.822	1.000	1.000	1.000

TABLE B-6 (45 DEG. 90 DEG. 6 HRS)

DIST	0 KILOMETERS											
	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.031	.031	.083	.061	.000	.000	.000	.000	.000	.000	.000	.000
11.5	.453	.514	.664	.689	.000	.106	.108	.225	.000	.000	.000	.000
12.5	.858	.892	.894	.903	.221	.514	.650	.814	.000	.022	.256	.381
13.5	1.000	1.000	1.000	1.000	.714	1.000	1.000	1.000	.262	.419	.881	.989
14.5	1.000	1.000	1.000	1.000	.958	1.000	1.000	1.000	.768	.942	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.253	.328	.331	.506	.000	.008	.000	.017	.000	.000	.000	.000
11.5	.589	.681	.750	.761	.003	.156	.300	.447	.000	.000	.053	.019
12.5	.919	.933	.939	.939	.367	.672	.800	.897	.003	.047	.322	.628
13.5	1.000	1.000	1.000	1.000	.756	1.000	1.000	1.000	.281	.528	.939	1.000
14.5	1.000	1.000	1.000	1.000	.958	1.000	1.000	1.000	.683	.956	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.981	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.331	.381	.497	.583	.000	.039	.006	.067	.000	.000	.000	.000
11.5	.661	.736	.783	.794	.039	.236	.383	.519	.000	.000	.100	.081
12.5	.944	.956	.956	.958	.417	.733	.864	.928	.011	.056	.350	.697
13.5	1.000	1.000	1.000	1.000	.775	1.000	1.000	1.000	.308	.569	.961	1.000
14.5	1.000	1.000	1.000	1.000	.958	1.000	1.000	1.000	.694	.964	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.978	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.022	.022	.075	.044	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.383	.414	.592	.631	.000	.067	.033	.106	.000	.000	.000	.000
11.5	.697	.783	.808	.817	.064	.272	.467	.572	.000	.000	.133	.122
12.5	.964	.975	.975	.975	.456	.775	.908	.953	.019	.069	.378	.747
13.5	1.000	1.000	1.000	1.000	.792	1.000	1.000	1.000	.328	.606	.975	1.000
14.5	1.000	1.000	1.000	1.000	.964	1.000	1.000	1.000	.703	.967	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.975	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-6 (45 DEG. 90 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.194	.269	.247	.419	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.486	.542	.675	.694	.000	.117	.142	.281	.000	.000	.008	.000
11.5	.789	.844	.847	.853	.139	.411	.572	.725	.000	.000	.183	.261
12.5	.992	.992	.992	.992	.497	.825	.975	.992	.044	.097	.558	.792
13.5	1.000	1.000	1.000	1.000	.814	1.000	1.000	1.000	.361	.653	.989	1.000
14.5	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.714	.972	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.969	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.011	.014	.067	.025	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.319	.378	.475	.578	.000	.033	.000	.053	.000	.000	.000	.000
10.5	.569	.656	.733	.744	.000	.150	.275	.428	.000	.000	.039	.008
11.5	.842	.878	.881	.886	.186	.489	.619	.797	.000	.011	.236	.331
12.5	1.000	1.000	1.000	1.000	.569	.922	1.000	1.000	.078	.186	.678	.894
13.5	1.000	1.000	1.000	1.000	.828	1.000	1.000	1.000	.383	.681	.994	1.000
14.5	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.719	.975	1.000	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.961	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-7 (45 DEG. 60 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.156	.156	.214	.219	.000	.000	.000	.000	.000	.000	.000	.000
5.5	.642	.767	.917	1.000	.020	.014	.056	.167	.000	.000	.000	.000
6.5	.917	1.000	1.000	1.000	.254	.366	.578	.797	.000	.011	.000	.206
7.5	1.000	1.000	1.000	1.000	.776	.842	.986	1.000	.000	.682	.457	.811
8.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.358	.414	.539	.606	.000	.000	.000	.000	.000	.000	.000	.000
5.5	.714	.872	.981	1.000	.040	.022	.150	.350	.000	.000	.000	.000
6.5	.950	1.000	1.000	1.000	.167	.350	.658	.869	.000	.014	.003	.200
7.5	1.000	1.000	1.000	1.000	.470	.703	.994	1.000	.000	.224	.248	.708
8.5	1.000	1.000	1.000	1.000	.778	.967	1.000	1.000	.630	.566	.763	.994
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.025	.025	.042	.025	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.419	.497	.656	.725	.000	.000	.000	.000	.000	.000	.000	.000
5.5	.733	.897	.992	1.000	.044	.025	.211	.392	.000	.000	.000	.000
6.5	.964	1.000	1.000	1.000	.172	.378	.681	.900	.000	.014	.006	.217
7.5	1.000	1.000	1.000	1.000	.453	.706	.994	1.000	.000	.185	.253	.708
8.5	1.000	1.000	1.000	1.000	.744	.958	1.000	1.000	.094	.459	.753	.992
9.5	1.000	1.000	1.000	1.000	.989	1.000	1.000	1.000	.298	.885	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.097	.097	.133	.136	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.481	.569	.731	.842	.000	.000	.003	.000	.000	.000	.000	.000
5.5	.756	.933	.997	1.000	.050	.033	.247	.453	.000	.000	.000	.006
6.5	.969	1.000	1.000	1.000	.175	.386	.700	.911	.000	.014	.022	.222
7.5	1.000	1.000	1.000	1.000	.453	.706	.994	1.000	.000	.183	.256	.708
8.5	1.000	1.000	1.000	1.000	.736	.953	1.000	1.000	.058	.439	.747	.986
9.5	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.172	.869	.997	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.715	1.000	1.000	1.000

TABLE B-7 (45 DEG. 60 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.261	.261	.336	.394	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.578	.692	.847	.983	.003	.000	.019	.047	.000	.000	.000	.000
5.5	.781	.972	1.000	1.000	.064	.058	.322	.522	.000	.000	.000	.022
6.5	.981	1.000	1.000	1.000	.181	.403	.722	.936	.000	.014	.047	.231
7.5	1.000	1.000	1.000	1.000	.453	.706	.994	1.000	.000	.183	.247	.708
8.5	1.000	1.000	1.000	1.000	.719	.944	1.000	1.000	.042	.422	.725	.986
9.5	1.000	1.000	1.000	1.000	.964	1.000	1.000	1.000	.076	.817	.986	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.497	.986	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.061	.061	.081	.078	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.339	.386	.475	.567	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.617	.736	.883	.997	.006	.006	.033	.117	.000	.000	.000	.000
5.5	.806	.983	1.000	1.000	.072	.086	.347	.550	.000	.000	.000	.058
6.5	.986	1.000	1.000	1.000	.181	.406	.733	.942	.000	.019	.050	.231
7.5	1.000	1.000	1.000	1.000	.439	.692	.989	1.000	.000	.175	.219	.686
8.5	1.000	1.000	1.000	1.000	.697	.917	1.000	1.000	.036	.386	.686	.958
9.5	1.000	1.000	1.000	1.000	.936	1.000	1.000	1.000	.072	.764	.961	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.436	.969	1.000	1.000

TABLE B-8 (45 DEG. 90 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.083	.108	.142	.183	.000	.000	.000	.000	.000	.000	.000	.000
5.5	.406	.478	.594	.628	.000	.070	.050	.186	.000	.000	.000	.000
6.5	.711	.794	.814	.822	.131	.314	.483	.597	.000	.000	.148	.145
7.5	.983	.983	.983	.983	.696	.838	.981	.983	.333	.305	.586	.792
8.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.208	.242	.319	.403	.000	.008	.000	.017	.000	.000	.000	.000
5.5	.489	.561	.669	.700	.000	.092	.183	.253	.000	.000	.008	.000
6.5	.775	.833	.842	.850	.113	.375	.525	.694	.000	.000	.153	.181
7.5	.983	.983	.983	.983	.512	.900	.983	.983	.098	.128	.564	.833
8.5	1.000	1.000	1.000	1.000	.858	1.000	1.000	1.000	.575	.762	.994	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.022	.022	.011	.044	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.236	.278	.386	.456	.000	.017	.000	.031	.000	.000	.000	.000
5.5	.511	.594	.683	.706	.006	.106	.211	.303	.000	.000	.014	.008
6.5	.797	.836	.844	.850	.117	.408	.544	.742	.000	.000	.175	.194
7.5	1.000	1.000	1.000	1.000	.511	.922	1.000	1.000	.090	.136	.594	.861
8.5	1.000	1.000	1.000	1.000	.819	1.000	1.000	1.000	.427	.705	.994	1.000
9.5	1.000	1.000	1.000	1.000	.972	1.000	1.000	1.000	.798	.958	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.053	.064	.108	.117	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.261	.322	.428	.517	.000	.025	.000	.042	.000	.000	.000	.000
5.5	.539	.628	.700	.728	.006	.117	.231	.347	.000	.000	.031	.008
6.5	.819	.853	.864	.872	.125	.425	.553	.764	.000	.000	.183	.203
7.5	1.000	1.000	1.000	1.000	.514	.925	1.000	1.000	.092	.142	.603	.864
8.5	1.000	1.000	1.000	1.000	.814	1.000	1.000	1.000	.392	.686	.994	1.000
9.5	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.769	.956	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-8 (45 DEG. 90 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.144	.175	.203	.297	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.319	.392	.478	.575	.000	.044	.017	.097	.000	.000	.000	.000
5.5	.561	.661	.719	.742	.011	.133	.256	.383	.000	.000	.039	.014
6.5	.836	.867	.872	.881	.128	.442	.564	.786	.000	.000	.189	.214
7.5	1.000	1.000	1.000	1.000	.511	.922	1.000	1.000	.083	.136	.592	.861
8.5	1.000	1.000	1.000	1.000	.800	1.000	1.000	1.000	.372	.661	.978	1.000
9.5	1.000	1.000	1.000	1.000	.961	1.000	1.000	1.000	.731	.936	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.983	.997	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.5	.042	.042	.075	.083	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.189	.228	.283	.381	.000	.003	.000	.006	.000	.000	.000	.000
4.5	.378	.450	.561	.617	.000	.058	.028	.147	.000	.000	.000	.000
5.5	.575	.681	.733	.747	.019	.150	.275	.414	.000	.000	.050	.022
6.5	.839	.869	.872	.881	.133	.447	.569	.792	.000	.000	.197	.219
7.5	.983	.983	.983	.983	.472	.867	.983	.983	.064	.114	.539	.806
8.5	1.000	1.000	1.000	1.000	.781	1.000	1.000	1.000	.350	.625	.975	1.000
9.5	1.000	1.000	1.000	1.000	.942	1.000	1.000	1.000	.664	.914	1.000	1.000
10.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.953	.989	1.000	1.000



TABLE B-9 (60 DEG. 60 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.389	.528	.608	.657	.000	.000	.039	.138	.000	.000	.000	.000
12.0	.839	.893	.925	.942	.069	.296	.507	.721	.000	.000	.000	.119
13.0	.992	1.000	1.000	1.000	.371	.751	.964	.983	.000	.042	.310	.667
14.0	1.000	1.000	1.000	1.000	.808	1.000	1.000	1.000	.145	.538	.904	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.086	.133	.165	.200	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.550	.686	.743	.782	.000	.050	.190	.324	.000	.000	.000	.000
12.0	.901	.967	.974	.996	.133	.386	.628	.803	.000	.000	.033	.229
13.0	.999	1.000	1.000	1.000	.483	.851	.987	1.000	.000	.119	.467	.832
14.0	1.000	1.000	1.000	1.000	.844	1.000	1.000	1.000	.115	.621	.929	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.667	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.974	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.171	.256	.376	.386	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.604	.726	.801	.825	.000	.078	.265	.383	.000	.000	.000	.000
12.0	.922	.989	.985	1.000	.165	.431	.713	.850	.000	.000	.054	.281
13.0	1.000	1.000	1.000	1.000	.533	.885	.992	1.000	.000	.156	.535	.885
14.0	1.000	1.000	1.000	1.000	.854	1.000	1.000	1.000	.122	.651	.935	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.668	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.971	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.318	.435	.544	.596	.000	.000	.001	.057	.000	.000	.000	.000
11.0	.703	.786	.844	.863	.006	.135	.318	.511	.000	.000	.000	.008
12.0	.933	.997	.989	1.000	.196	.475	.763	.875	.000	.000	.089	.336
13.0	1.000	1.000	1.000	1.000	.568	.908	.994	1.000	.000	.178	.582	.918
14.0	1.000	1.000	1.000	1.000	.869	1.000	1.000	1.000	.138	.689	.944	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.669	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.961	1.000	1.000	1.000

TABLE B-9 (60 DEG. 60 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.072	.114	.125	.171	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.467	.626	.672	.721	.000	.007	.099	.228	.000	.000	.000	.000
11.0	.813	.865	.903	.921	.050	.261	.461	.686	.000	.000	.000	.081
12.0	.954	1.000	.999	1.000	.246	.565	.851	.913	.000	.000	.161	.436
13.0	1.000	1.000	1.000	1.000	.626	.937	1.000	1.000	.004	.238	.647	.958
14.0	1.000	1.000	1.000	1.000	.885	1.000	1.000	1.000	.146	.715	.956	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.668	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.950	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.236	.332	.439	.493	.000	.000	.000	.008	.000	.000	.000	.000
10.0	.564	.697	.761	.796	.000	.058	.214	.338	.000	.000	.000	.000
11.0	.861	.918	.946	.958	.092	.329	.556	.750	.000	.000	.004	.160
12.0	.968	1.000	1.000	1.000	.286	.624	.913	.940	.000	.010	.214	.494
13.0	1.000	1.000	1.000	1.000	.657	.958	1.000	1.000	.017	.275	.685	.979
14.0	1.000	1.000	1.000	1.000	.896	1.000	1.000	1.000	.178	.758	.963	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.663	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.936	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.060	.097	.103	.144	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.401	.543	.614	.667	.000	.000	.046	.150	.000	.000	.000	.000
10.0	.674	.769	.828	.850	.000	.117	.297	.476	.000	.000	.000	.000
11.0	.900	.958	.968	.992	.125	.381	.611	.796	.000	.000	.028	.222
12.0	.981	1.000	1.000	1.000	.332	.704	.944	.962	.000	.022	.264	.601
13.0	1.000	1.000	1.000	1.000	.674	.964	1.000	1.000	.022	.300	.707	.988
14.0	1.000	1.000	1.000	1.000	.900	1.000	1.000	1.000	.192	.774	.965	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.650	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.921	1.000	1.000	1.000

TABLE B-10 (60 DEG. 90 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.356	.508	.564	.614	.000	.000	.039	.106	.000	.000	.000	.000
12.0	.919	.950	.997	1.000	.292	.569	.731	.847	.077	.147	.275	.456
13.0	1.000	1.000	1.000	1.000	.717	.961	.978	1.000	.293	.431	.742	.944
14.0	1.000	1.000	1.000	1.000	.942	1.000	1.000	1.000	.635	.869	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.056	.069	.078	.125	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.611	.744	.789	.822	.000	.103	.325	.422	.000	.000	.000	.000
12.0	.989	.972	1.000	1.000	.381	.697	.839	.975	.139	.236	.394	.542
13.0	1.000	1.000	1.000	1.000	.775	.992	1.000	1.000	.333	.492	.833	.986
14.0	1.000	1.000	1.000	1.000	.956	1.000	1.000	1.000	.653	.900	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.986	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.200	.233	.261	.372	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.739	.828	.861	.900	.081	.258	.483	.594	.000	.000	.000	.161
12.0	1.000	.978	1.000	1.000	.425	.742	.867	1.000	.158	.264	.453	.592
13.0	1.000	1.000	1.000	1.000	.794	.997	1.000	1.000	.361	.531	.881	.992
14.0	1.000	1.000	1.000	1.000	.964	1.000	1.000	1.000	.672	.911	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.989	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.297	.378	.464	.525	.000	.000	.000	.036	.000	.000	.000	.000
11.0	.825	.892	.928	.961	.139	.358	.614	.700	.000	.000	.058	.278
12.0	1.000	.989	1.000	1.000	.481	.786	.892	1.000	.189	.294	.500	.669
13.0	1.000	1.000	1.000	1.000	.814	1.000	1.000	1.000	.392	.567	.906	.997
14.0	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.689	.922	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.989	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-10 (60 DEG. 90 DEG. 6 HRS) (continued)

## 1500 KILOMETER

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.047	.058	.067	.106	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.436	.636	.678	.725	.000	.000	.156	.175	.000	.000	.000	.000
11.0	.897	.944	.986	1.000	.261	.522	.697	.806	.056	.119	.236	.428
12.0	1.000	.997	1.000	1.000	.561	.847	.933	1.000	.217	.336	.583	.772
13.0	1.000	1.000	1.000	1.000	.836	1.000	1.000	1.000	.428	.622	.936	1.000
14.0	1.000	1.000	1.000	1.000	.972	1.000	1.000	1.000	.706	.931	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.989	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.250	.289	.361	.450	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.658	.775	.819	.853	.022	.158	.356	.489	.000	.000	.000	.047
11.0	.947	.958	1.000	1.000	.331	.622	.778	.897	.100	.186	.317	.492
12.0	1.000	1.000	1.000	1.000	.633	.914	.950	1.000	.247	.367	.653	.867
13.0	1.000	1.000	1.000	1.000	.856	1.000	1.000	1.000	.461	.664	.956	1.000
14.0	1.000	1.000	1.000	1.000	.978	1.000	1.000	1.000	.717	.939	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.986	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.036	.047	.056	.083	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.369	.528	.583	.636	.000	.000	.044	.117	.000	.000	.000	.000
10.0	.800	.875	.906	.947	.119	.328	.569	.672	.000	.000	.000	.239
11.0	.975	.969	1.000	1.000	.375	.683	.828	.958	.133	.228	.383	.533
12.0	1.000	1.000	1.000	1.000	.681	.939	.967	1.000	.264	.403	.703	.922
13.0	1.000	1.000	1.000	1.000	.864	1.000	1.000	1.000	.483	.694	.969	1.000
14.0	1.000	1.000	1.000	1.000	.978	1.000	1.000	1.000	.725	.942	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-11 (60 DEG. 60 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.361	.469	.575	.611	.000	.000	.011	.081	.000	.000	.000	.000
6.0	.772	.808	.850	.875	.020	.162	.356	.542	.000	.000	.000	.015
7.0	.975	.997	1.000	1.000	.434	.592	.775	.906	.000	.000	.189	.455
8.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
9.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.106	.167	.211	.272	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.469	.597	.669	.689	.000	.006	.086	.183	.000	.000	.000	.000
6.0	.831	.853	.894	.914	.039	.214	.442	.636	.000	.000	.000	.056
7.0	.983	1.000	1.000	1.000	.266	.586	.822	.928	.000	.000	.136	.469
8.0	1.000	1.000	1.000	1.000	.588	.922	1.000	1.000	.016	.275	.658	.933
9.0	1.000	1.000	1.000	1.000	.936	1.000	1.000	1.000	.531	.886	.983	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.194	.272	.344	.417	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.519	.644	.717	.711	.000	.019	.136	.253	.000	.000	.000	.000
6.0	.861	.872	.917	.931	.050	.242	.481	.681	.000	.000	.000	.075
7.0	.983	1.000	1.000	1.000	.275	.608	.828	.942	.000	.000	.142	.486
8.0	1.000	1.000	1.000	1.000	.583	.922	1.000	1.000	.006	.261	.658	.933
9.0	1.000	1.000	1.000	1.000	.917	1.000	1.000	1.000	.187	.817	.983	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.877	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.247	.342	.431	.500	.000	.000	.000	.014	.000	.000	.000	.000
5.0	.581	.697	.744	.750	.000	.036	.161	.325	.000	.000	.000	.000
6.0	.869	.881	.925	.936	.058	.261	.494	.700	.000	.000	.000	.092
7.0	.983	1.000	1.000	1.000	.294	.631	.842	.944	.000	.000	.150	.517
8.0	1.000	1.000	1.000	1.000	.581	.914	1.000	1.000	.006	.256	.647	.933
9.0	1.000	1.000	1.000	1.000	.903	1.000	1.000	1.000	.149	.794	.969	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.747	1.000	1.000	1.000

TABLE B-11 (60 DEG. 60 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.083	.133	.150	.217	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.344	.456	.567	.592	.000	.000	.011	.075	.000	.000	.000	.000
5.0	.644	.731	.772	.789	.000	.067	.197	.397	.000	.000	.000	.000
6.0	.886	.903	.942	.953	.081	.283	.519	.717	.000	.000	.000	.128
7.0	.983	1.000	1.000	1.000	.294	.633	.850	.947	.000	.000	.161	.517
8.0	1.000	1.000	1.000	1.000	.575	.911	1.000	1.000	.003	.244	.639	.931
9.0	1.000	1.000	1.000	1.000	.881	1.000	1.000	1.000	.111	.736	.950	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.681	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.175	.247	.317	.383	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.406	.528	.608	.636	.000	.000	.044	.128	.000	.000	.000	.000
5.0	.678	.750	.800	.806	.000	.089	.242	.444	.000	.000	.000	.000
6.0	.903	.914	.953	.969	.086	.292	.531	.728	.000	.000	.000	.136
7.0	.983	1.000	1.000	1.000	.294	.631	.844	.944	.000	.000	.158	.517
8.0	1.000	1.000	1.000	1.000	.556	.894	1.000	1.000	.000	.222	.611	.911
9.0	1.000	1.000	1.000	1.000	.858	.997	1.000	1.000	.092	.697	.919	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.586	.997	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.047	.085	.100	.133	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.225	.314	.400	.475	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.436	.564	.619	.664	.000	.000	.067	.153	.000	.000	.000	.000
5.0	.700	.764	.806	.825	.000	.097	.244	.464	.000	.000	.000	.000
6.0	.903	.914	.956	.969	.089	.294	.533	.728	.000	.000	.000	.139
7.0	.983	1.000	1.000	1.000	.272	.606	.828	.936	.000	.000	.139	.486
8.0	1.000	1.000	1.000	1.000	.522	.878	1.000	1.000	.000	.178	.544	.875
9.0	1.000	1.000	1.000	1.000	.831	.986	1.000	1.000	.058	.625	.900	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.478	.978	1.000	1.000

TABLE B-12 (60 DEG. 90 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.328	.442	.514	.578	.000	.000	.053	.067	.000	.000	.000	.000
6.0	.850	.919	.950	.975	.215	.419	.628	.731	.040	.028	.114	.344
7.0	1.000	.994	1.000	1.000	.657	.817	.914	1.000	.444	.502	.572	.733
8.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.111	.125	.136	.217	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.453	.631	.681	.719	.000	.014	.136	.203	.000	.000	.000	.000
6.0	.886	.944	.983	.992	.266	.508	.681	.783	.056	.094	.217	.428
7.0	1.000	.997	1.000	1.000	.573	.842	.936	1.000	.236	.335	.567	.753
8.0	1.000	1.000	1.000	1.000	.850	1.000	1.000	1.000	.509	.688	.956	.992
9.0	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.863	.969	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.178	.217	.275	.353	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.531	.681	.717	.756	.000	.061	.225	.319	.000	.000	.000	.000
6.0	.897	.950	.989	.992	.286	.533	.706	.808	.061	.122	.244	.450
7.0	1.000	.997	1.000	1.000	.575	.850	.936	1.000	.214	.336	.581	.769
8.0	1.000	1.000	1.000	1.000	.836	1.000	1.000	1.000	.456	.672	.956	.992
9.0	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.758	.944	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.211	.283	.331	.442	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.600	.722	.767	.797	.000	.103	.272	.414	.000	.000	.000	.000
6.0	.906	.956	.997	.992	.303	.556	.725	.822	.067	.131	.267	.475
7.0	1.000	.997	1.000	1.000	.583	.867	.942	1.000	.217	.342	.592	.786
8.0	1.000	1.000	1.000	1.000	.836	1.000	1.000	1.000	.453	.664	.953	.992
9.0	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.753	.939	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-12 (60 DEG. 90 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.069	.078	.100	.147	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.322	.428	.506	.575	.000	.000	.039	.056	.000	.000	.000	.000
5.0	.686	.792	.825	.864	.000	.144	.339	.522	.000	.000	.000	.000
6.0	.928	.964	1.000	.997	.331	.597	.747	.864	.092	.161	.294	.497
7.0	1.000	.997	1.000	1.000	.594	.869	.944	1.000	.222	.347	.594	.797
8.0	1.000	1.000	1.000	1.000	.819	1.000	1.000	1.000	.436	.636	.936	.986
9.0	1.000	1.000	1.000	1.000	.956	1.000	1.000	1.000	.725	.928	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.997	.997	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.161	.186	.236	.308	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.378	.531	.583	.644	.000	.000	.081	.114	.000	.000	.000	.000
5.0	.717	.817	.847	.872	.025	.186	.431	.569	.000	.000	.000	.050
6.0	.931	.967	1.000	.997	.336	.606	.761	.869	.094	.167	.303	.506
7.0	1.000	.997	1.000	1.000	.583	.867	.942	1.000	.217	.342	.594	.789
8.0	1.000	1.000	1.000	1.000	.808	1.000	1.000	1.000	.422	.614	.928	.981
9.0	1.000	1.000	1.000	1.000	.944	1.000	1.000	1.000	.678	.897	1.000	1.000
10.0	1.000	1.000	1.000	1.000	.997	1.000	1.000	1.000	.969	.997	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
2.0	.039	.047	.069	.086	.000	.000	.000	.000	.000	.000	.000	.000
3.0	.206	.264	.314	.422	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.403	.578	.625	.667	.000	.000	.100	.147	.000	.000	.000	.000
5.0	.756	.839	.867	.903	.058	.242	.489	.617	.000	.000	.000	.119
6.0	.931	.967	1.000	.997	.336	.606	.767	.869	.094	.167	.306	.508
7.0	1.000	.997	1.000	1.000	.575	.850	.936	1.000	.211	.333	.581	.767
8.0	1.000	1.000	1.000	1.000	.800	.992	1.000	1.000	.394	.586	.908	.975
9.0	1.000	1.000	1.000	1.000	.928	1.000	1.000	1.000	.650	.869	1.000	1.000
10.0	1.000	1.000	1.000	1.000	.992	1.000	1.000	1.000	.939	.992	1.000	1.000



TABLE B-13 (75 DEG. 60 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.5	.429	.478	.500	.508	.022	.108	.221	.338	.000	.000	.000	.033
12.5	.731	.754	.768	.779	.364	.532	.625	.678	.000	.178	.386	.471
13.5	.939	.965	.972	.975	.644	.782	.851	.897	.419	.514	.642	.746
14.5	1.000	1.000	1.000	1.000	.943	1.000	1.000	1.000	.768	.863	.972	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.106	.167	.200	.242	.000	.000	.000	.008	.000	.000	.000	.000
11.5	.547	.576	.594	.613	.132	.300	.408	.471	.000	.000	.051	.231
12.5	.783	.808	.822	.829	.433	.601	.683	.733	.018	.258	.456	.553
13.5	.965	.992	.993	1.000	.682	.813	.892	.929	.401	.550	.676	.778
14.5	1.000	1.000	1.000	1.000	.957	1.000	1.000	1.000	.669	.894	.986	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.988	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.186	.275	.336	.333	.000	.000	.047	.083	.000	.000	.000	.000
11.5	.592	.614	.632	.650	.172	.372	.456	.526	.000	.000	.087	.307
12.5	.804	.828	.840	.846	.458	.626	.706	.757	.035	.296	.486	.579
13.5	.968	1.000	.996	1.000	.706	.831	.917	.942	.417	.565	.689	.804
14.5	1.000	1.000	1.000	1.000	.960	1.000	1.000	1.000	.683	.901	.989	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.324	.392	.414	.413	.000	.044	.133	.242	.000	.000	.000	.000
11.5	.625	.647	.667	.679	.204	.407	.496	.565	.000	.018	.161	.336
12.5	.821	.844	.857	.863	.482	.649	.722	.772	.083	.333	.507	.604
13.5	.975	1.000	.999	1.000	.714	.843	.932	.950	.429	.575	.699	.814
14.5	1.000	1.000	1.000	1.000	.965	1.000	1.000	1.000	.694	.914	.992	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.979	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-13 (75 DEG. 60 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.029	.058	.076	.087	.000	.000	.000	.000	.000	.000	.000	.000
10.5	.444	.494	.515	.525	.028	.119	.267	.354	.000	.000	.000	.042
11.5	.681	.700	.719	.729	.263	.460	.561	.625	.000	.067	.293	.388
12.5	.850	.876	.883	.892	.525	.683	.757	.806	.144	.389	.542	.640
13.5	.983	1.000	1.000	1.000	.746	.881	.963	.967	.450	.594	.718	.854
14.5	1.000	1.000	1.000	1.000	.968	1.000	1.000	1.000	.696	.919	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.976	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.165	.254	.332	.326	.000	.000	.039	.056	.000	.000	.000	.000
10.5	.522	.558	.578	.596	.107	.250	.375	.439	.000	.000	.026	.178
11.5	.718	.739	.754	.763	.340	.514	.613	.668	.000	.157	.369	.449
12.5	.874	.900	.908	.917	.554	.706	.781	.825	.229	.422	.567	.667
13.5	.987	1.000	1.000	1.000	.763	.901	.978	.979	.468	.608	.735	.872
14.5	1.000	1.000	1.000	1.000	.971	1.000	1.000	1.000	.701	.926	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.968	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.353	.410	.435	.433	.000	.061	.153	.272	.000	.000	.000	.000
10.5	.583	.606	.626	.642	.161	.357	.443	.517	.000	.000	.079	.286
11.5	.750	.772	.786	.796	.389	.557	.644	.697	.006	.206	.408	.500
12.5	.888	.914	.925	.929	.576	.725	.799	.842	.265	.447	.585	.688
13.5	.992	1.000	1.000	1.000	.772	.911	.985	.983	.476	.617	.750	.888
14.5	1.000	1.000	1.000	1.000	.969	1.000	1.000	1.000	.697	.924	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.960	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.5	.042	.083	.089	.125	.000	.000	.000	.000	.000	.000	.000	.000
9.5	.401	.450	.471	.478	.008	.087	.189	.315	.000	.000	.000	.013
10.5	.604	.625	.643	.658	.181	.382	.468	.542	.000	.008	.114	.311
11.5	.761	.785	.796	.806	.401	.575	.658	.713	.010	.222	.422	.518
12.5	.899	.925	.933	.938	.586	.731	.804	.854	.278	.456	.596	.692
13.5	.992	1.000	1.000	1.000	.774	.911	.986	.983	.481	.621	.751	.888
14.5	1.000	1.000	1.000	1.000	.968	1.000	1.000	1.000	.696	.918	.994	1.000
15.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.954	1.000	1.000	1.000
16.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-14 (75 DEG. 90 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.497	.542	.553	.564	.228	.331	.417	.442	.097	.153	.222	.311
12.0	.756	.781	.789	.806	.511	.617	.678	.714	.342	.425	.506	.581
13.0	.942	.958	.972	.983	.711	.811	.867	.897	.514	.614	.706	.775
14.0	1.000	1.000	1.000	1.000	.936	1.000	1.000	1.000	.728	.861	.989	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.108	.111	.158	.189	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.611	.644	.653	.667	.350	.461	.536	.567	.200	.272	.353	.436
12.0	.808	.831	.839	.856	.578	.675	.733	.767	.394	.481	.567	.639
13.0	.969	.981	.997	1.000	.744	.850	.900	.939	.547	.644	.739	.808
14.0	1.000	1.000	1.000	1.000	.953	1.000	1.000	1.000	.761	.906	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.347	.406	.417	.436	.033	.094	.189	.242	.000	.000	.000	.067
11.0	.650	.681	.694	.706	.392	.506	.572	.606	.239	.314	.394	.481
12.0	.831	.850	.867	.875	.600	.700	.753	.789	.419	.500	.594	.661
13.0	.986	.986	1.000	1.000	.758	.878	.919	.972	.561	.656	.758	.825
14.0	1.000	1.000	1.000	1.000	.961	1.000	1.000	1.000	.767	.919	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.464	.506	.514	.531	.172	.272	.367	.392	.050	.094	.156	.253
11.0	.683	.711	.719	.733	.428	.542	.608	.642	.272	.350	.433	.508
12.0	.847	.867	.883	.892	.622	.719	.775	.806	.436	.519	.614	.683
13.0	.994	.989	1.000	1.000	.769	.892	.939	.992	.572	.672	.769	.833
14.0	1.000	1.000	1.000	1.000	.967	1.000	1.000	1.000	.783	.928	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-14 (75 DEG. 90 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.086	.086	.122	.158	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.553	.592	.600	.614	.292	.400	.478	.511	.150	.217	.292	.375
11.0	.736	.764	.772	.786	.492	.597	.661	.692	.325	.408	.489	.564
12.0	.881	.900	.914	.925	.653	.753	.806	.839	.467	.550	.647	.717
13.0	1.000	.997	1.000	1.000	.806	.925	.961	1.000	.589	.689	.808	.886
14.0	1.000	1.000	1.000	1.000	.978	1.000	1.000	1.000	.797	.942	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.425	.464	.478	.492	.111	.211	.317	.344	.008	.031	.081	.189
10.0	.625	.656	.667	.678	.364	.475	.544	.583	.217	.289	.364	.447
11.0	.772	.797	.806	.822	.533	.636	.697	.731	.361	.444	.531	.603
12.0	.906	.928	.939	.950	.681	.772	.831	.861	.489	.583	.669	.739
13.0	1.000	1.000	1.000	1.000	.833	.950	.978	1.000	.606	.706	.839	.925
14.0	1.000	1.000	1.000	1.000	.981	1.000	1.000	1.000	.806	.950	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.061	.061	.081	.122	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.511	.550	.564	.578	.239	.344	.428	.450	.108	.164	.231	.322
10.0	.669	.697	.717	.722	.414	.528	.594	.625	.267	.339	.419	.497
11.0	.806	.828	.839	.853	.575	.672	.731	.764	.394	.478	.564	.639
12.0	.928	.944	.956	.969	.700	.800	.850	.886	.506	.600	.689	.764
13.0	1.000	1.000	1.000	1.000	.847	.967	.978	1.000	.617	.711	.856	.947
14.0	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.819	.953	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.211	.289	.306	.328	.000	.000	.031	.078	.000	.000	.000	.000
9.0	.539	.578	.592	.600	.275	.381	.461	.492	.139	.200	.272	.358
10.0	.689	.717	.733	.744	.439	.553	.611	.644	.283	.361	.439	.517
11.0	.817	.836	.853	.864	.586	.683	.742	.772	.406	.489	.578	.644
12.0	.931	.950	.958	.975	.703	.806	.856	.889	.508	.603	.697	.769
13.0	1.000	1.000	1.000	1.000	.856	.969	.983	1.000	.617	.719	.864	.953
14.0	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.822	.953	1.000	1.000
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-15 (75 DEG. 60 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.110	.183	.213	.266	.000	.000	.000	.019	.000	.000	.000	.000
6.0	.560	.578	.589	.595	.139	.279	.426	.494	.000	.000	.023	.173
7.0	.830	.826	.831	.829	.606	.740	.770	.806	.000	.385	.652	.726
8.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.236	.328	.364	.386	.000	.008	.067	.128	.000	.000	.000	.000
6.0	.575	.594	.614	.611	.160	.303	.431	.492	.000	.000	.070	.256
7.0	.781	.786	.800	.808	.374	.578	.653	.714	.000	.228	.430	.519
8.0	.953	.961	.972	.975	.629	.772	.847	.900	.500	.553	.648	.719
9.0	1.000	1.000	1.000	1.000	.931	.994	1.000	1.000	.866	.861	.966	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.292	.367	.406	.417	.000	.028	.114	.183	.000	.000	.000	.000
6.0	.600	.614	.628	.633	.178	.331	.453	.517	.000	.000	.089	.289
7.0	.789	.794	.808	.817	.372	.581	.664	.719	.000	.225	.433	.525
8.0	.953	.961	.972	.975	.611	.772	.847	.900	.355	.517	.644	.719
9.0	1.000	1.000	1.000	1.000	.894	.989	1.000	1.000	.606	.797	.950	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.961	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.000	.028	.025	.025	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.350	.408	.431	.444	.000	.058	.142	.239	.000	.000	.000	.000
6.0	.617	.625	.642	.644	.194	.353	.467	.533	.000	.000	.106	.319
7.0	.803	.806	.817	.828	.381	.592	.667	.731	.000	.233	.444	.536
8.0	.953	.961	.972	.975	.608	.772	.844	.900	.353	.514	.644	.719
9.0	1.000	1.000	1.000	1.000	.886	.983	1.000	1.000	.592	.783	.928	1.000
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.939	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-15 (75 DEG. 60 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.083	.144	.181	.228	.000	.000	.000	.000	.000	.000	.000	.000
5.0	.406	.456	.481	.492	.008	.086	.197	.283	.000	.000	.000	.008
6.0	.631	.639	.656	.658	.214	.375	.483	.556	.000	.008	.142	.333
7.0	.806	.808	.822	.831	.386	.597	.669	.731	.003	.242	.450	.542
8.0	.947	.956	.972	.975	.597	.772	.836	.892	.350	.503	.642	.717
9.0	1.000	1.000	1.000	1.000	.861	.978	1.000	1.000	.564	.744	.906	.992
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.903	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.136	.219	.275	.297	.000	.000	.006	.050	.000	.000	.000	.000
5.0	.431	.469	.492	.497	.022	.119	.250	.328	.000	.000	.000	.025
6.0	.644	.650	.664	.672	.222	.383	.497	.569	.000	.014	.158	.339
7.0	.806	.808	.822	.831	.381	.594	.667	.731	.000	.233	.447	.539
8.0	.939	.947	.969	.969	.581	.753	.828	.872	.325	.489	.617	.697
9.0	1.000	1.000	1.000	1.000	.825	.958	1.000	1.000	.542	.706	.850	.967
10.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.831	1.000	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.192	.281	.325	.347	.000	.000	.028	.089	.000	.000	.000	.000
5.0	.464	.492	.511	.525	.033	.144	.269	.361	.000	.000	.000	.042
6.0	.644	.650	.664	.672	.222	.383	.503	.569	.000	.014	.161	.339
7.0	.786	.792	.803	.811	.372	.581	.664	.719	.000	.225	.433	.522
8.0	.925	.933	.944	.950	.569	.739	.808	.867	.300	.475	.597	.686
9.0	1.000	1.000	1.000	1.000	.792	.936	.997	1.000	.517	.667	.806	.933
10.0	1.000	1.000	1.000	1.000	.997	1.000	1.000	1.000	.761	.986	1.000	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.994	1.000	1.000	1.000

## 2750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
3.0	.000	.017	.019	.017	.000	.000	.000	.000	.000	.000	.000	.000
4.0	.206	.300	.333	.353	.000	.000	.047	.108	.000	.000	.000	.000
5.0	.469	.494	.514	.531	.033	.147	.269	.367	.000	.000	.000	.044
6.0	.644	.650	.664	.672	.222	.383	.494	.569	.000	.014	.158	.339
7.0	.781	.786	.800	.808	.367	.578	.653	.714	.000	.219	.428	.519
8.0	.917	.925	.939	.942	.553	.731	.808	.858	.286	.464	.597	.675
9.0	.997	1.000	1.000	1.000	.767	.925	.992	.994	.497	.644	.781	.908
10.0	1.000	1.000	1.000	1.000	.986	1.000	1.000	1.000	.733	.958	.994	1.000
11.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	.986	1.000	1.000	1.000

TABLE B-16 (75 DEG. 90 DEG. 3 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.226	.312	.328	.361	.000	.000	.064	.079	.000	.000	.000	.000
5.5	.609	.635	.644	.656	.431	.495	.547	.562	.318	.374	.429	.489
6.5	.779	.805	.822	.825	.689	.708	.740	.739	.635	.654	.681	.711
7.5	.941	.964	.969	.978	.912	.898	.912	.907	.896	.907	.904	.913
8.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.461	.494	.517	.522	.168	.272	.361	.394	.051	.084	.147	.239
5.5	.642	.678	.689	.703	.399	.500	.572	.594	.240	.309	.386	.478
6.5	.800	.828	.836	.844	.575	.667	.725	.758	.393	.476	.561	.642
7.5	.944	.964	.983	.983	.729	.819	.878	.906	.542	.632	.714	.794
8.5	1.000	1.000	1.000	1.000	.927	1.000	1.000	1.000	.726	.841	.983	.997
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.036	.036	.047	.075	.000	.000	.000	.000	.000	.000	.000	.000
4.5	.492	.528	.550	.556	.211	.317	.397	.428	.083	.125	.203	.292
5.5	.667	.692	.703	.711	.414	.519	.586	.619	.250	.328	.406	.494
6.5	.808	.833	.850	.856	.578	.672	.733	.764	.403	.481	.569	.650
7.5	.944	.967	.983	.986	.728	.819	.881	.906	.536	.633	.717	.797
8.5	1.000	1.000	1.000	1.000	.917	1.000	1.000	1.000	.706	.825	.972	.997
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.161	.203	.239	.286	.000	.000	.008	.017	.000	.000	.000	.000
4.5	.517	.553	.558	.578	.247	.356	.431	.458	.100	.158	.239	.331
5.5	.672	.706	.722	.728	.428	.533	.603	.625	.269	.344	.422	.508
6.5	.811	.839	.856	.861	.586	.681	.747	.767	.408	.494	.575	.656
7.5	.947	.969	.989	.989	.731	.825	.883	.906	.536	.633	.717	.800
8.5	1.000	1.000	1.000	1.000	.911	1.000	1.000	1.000	.700	.819	.967	.989
9.5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-16 (75 DEG. 90 DEG. 3 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.381	.419	.433	.453	.017	.106	.225	.300	.000	.000	.000	.033
4.5	.558	.589	.600	.611	.297	.403	.475	.511	.147	.214	.289	.375
5.5	.700	.725	.733	.744	.450	.558	.625	.656	.283	.361	.447	.528
6.5	.825	.853	.858	.878	.597	.692	.758	.775	.411	.503	.586	.667
7.5	.944	.967	.983	.986	.725	.819	.881	.906	.536	.633	.714	.794
8.5	1.000	1.000	1.000	1.000	.900	.994	1.000	1.000	.683	.800	.953	.983
9.5	1.000	1.000	1.000	1.000	.994	1.000	1.000	1.000	.983	.997	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.108	.128	.153	.206	.000	.000	.000	.000	.000	.000	.000	.000
3.5	.447	.483	.492	.511	.142	.253	.339	.378	.028	.061	.128	.222
4.5	.578	.614	.622	.639	.328	.431	.506	.525	.169	.236	.319	.408
5.5	.706	.733	.750	.756	.464	.567	.631	.658	.300	.375	.458	.542
6.5	.831	.858	.861	.878	.600	.692	.758	.783	.411	.506	.592	.667
7.5	.939	.961	.975	.978	.722	.817	.878	.900	.528	.625	.711	.794
8.5	1.000	1.000	1.000	1.000	.894	.994	.997	1.000	.669	.786	.931	.983
9.5	1.000	1.000	1.000	1.000	.992	1.000	1.000	1.000	.917	.983	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.200	.278	.300	.325	.000	.000	.050	.064	.000	.000	.000	.000
3.5	.475	.514	.522	.539	.192	.297	.378	.411	.061	.111	.178	.269
4.5	.597	.625	.639	.644	.339	.447	.517	.550	.183	.256	.333	.422
5.5	.708	.736	.756	.758	.467	.569	.636	.664	.306	.381	.464	.542
6.5	.825	.853	.858	.878	.597	.692	.758	.775	.411	.500	.586	.667
7.5	.936	.961	.969	.978	.711	.808	.858	.897	.519	.614	.708	.783
8.5	1.000	1.000	1.000	1.000	.858	.978	.992	1.000	.642	.736	.886	.944
9.5	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.886	.978	1.000	1.000

## 2750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
1.5	.000	.011	.017	.022	.000	.000	.000	.000	.000	.000	.000	.000
2.5	.200	.336	.356	.383	.000	.011	.089	.106	.000	.000	.000	.000
3.5	.475	.517	.525	.544	.192	.311	.397	.422	.061	.117	.192	.281
4.5	.597	.633	.644	.656	.339	.450	.519	.558	.183	.258	.336	.422
5.5	.708	.736	.756	.758	.467	.569	.636	.664	.306	.381	.464	.542
6.5	.825	.850	.856	.872	.597	.692	.753	.775	.411	.500	.578	.667
7.5	.936	.958	.967	.978	.711	.803	.858	.889	.519	.608	.697	.781
8.5	1.000	1.000	1.000	1.000	.858	.972	.992	1.000	.642	.728	.869	.944
9.5	1.000	1.000	1.000	1.000	.983	1.000	1.000	1.000	.886	.964	1.000	1.000



TABLE B-17 (90 DEG. 60 DEG. 6 HRS)

## 0 KILOMETERS

[illegible]

## 500 KILOMETERS

[illegible]

750 KILOMETERS

[illegible]

1000 KILOMETERS

[illegible]

TABLE B-17 (90 DEG. 60 DEG. 6 HRS) (continued)

**1500 KILOMETERS**

[illegible]

## 2000 KILOMETERS

[illegible]

**2500 KILOMETERS**

[illegible]

2750 KILOMETERS

[illegible]

TABLE B-18 (90 DEG. 90 DEG. 6 HRS)

## 0 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
11.0	.325	.325	.325	.300	.325	.325	.325	.300	.325	.325	.325	.300
12.0	.558	.558	.558	.514	.558	.558	.558	.514	.558	.558	.558	.514
13.0	.742	.742	.742	.708	.742	.742	.742	.708	.742	.742	.742	.708
14.0	.892	.892	.892	.875	.892	.892	.892	.875	.892	.892	.892	.875
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125	.125
11.0	.425	.425	.425	.425	.425	.425	.425	.425	.425	.425	.425	.425
12.0	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608
13.0	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775
14.0	.908	.908	.908	.908	.908	.908	.908	.908	.908	.908	.908	.908
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.225	.225	.225	.225	.225	.225	.225	.225	.225	.225	.225	.225
11.0	.458	.458	.458	.458	.458	.458	.458	.458	.458	.458	.458	.458
12.0	.642	.642	.642	.642	.642	.642	.642	.642	.642	.642	.642	.642
13.0	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775	.775
14.0	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 1000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10.0	.292	.292	.292	.292	.292	.292	.292	.292	.292	.292	.292	.292
11.0	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492
12.0	.658	.658	.658	.658	.658	.658	.658	.658	.658	.658	.658	.658
13.0	.792	.792	.792	.792	.792	.792	.792	.792	.792	.792	.792	.792
14.0	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925	.925
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-18 (90 DEG. 90 DEG. 6 HRS) (continued)

## 1500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.108	.108	.108	.108	.108	.108	.108	.108	.108	.108	.108	.108
10.0	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375
11.0	.542	.542	.542	.542	.542	.542	.542	.542	.542	.542	.542	.542
12.0	.692	.692	.692	.692	.692	.692	.692	.692	.692	.692	.692	.692
13.0	.808	.808	.808	.808	.808	.808	.808	.808	.808	.808	.808	.808
14.0	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2000 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
9.0	.258	.258	.258	.258	.258	.258	.258	.258	.258	.258	.258	.258
10.0	.442	.442	.442	.442	.442	.442	.442	.442	.442	.442	.442	.442
11.0	.575	.575	.575	.575	.575	.575	.575	.575	.575	.575	.575	.575
12.0	.708	.708	.708	.708	.708	.708	.708	.708	.708	.708	.708	.708
13.0	.825	.825	.825	.825	.825	.825	.825	.825	.825	.825	.825	.825
14.0	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2500 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.092	.092	.092	.092	.092	.092	.092	.092	.092	.092	.092	.092
9.0	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342
10.0	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492	.492
11.0	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608	.608
12.0	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725
13.0	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842
14.0	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

## 2750 KILOMETERS

DIST	FIRST CONST				SECOND CONST				THIRD CONST			
	1	2	3	4	1	2	3	4	1	2	3	4
8.0	.175	.175	.175	.175	.175	.175	.175	.175	.175	.175	.175	.175
9.0	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375	.375
10.0	.508	.508	.508	.508	.508	.508	.508	.508	.508	.508	.508	.508
11.0	.625	.625	.625	.625	.625	.625	.625	.625	.625	.625	.625	.625
12.0	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725	.725
13.0	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842	.842
14.0	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942	.942
15.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TABLE B-19 (90 DEG. 60 DEG. 3 HRS)

## 0 KILOMETERS

[illegible]

## 500 KILOMETERS

[illegible]

750 KILOMETERS

[illegible]

1000 KILOMETERS

[illegible]

TABLE B-19 (90 DEG. 60 DEG. 3 HRS) (continued)

**1500 KILOMETERS**

[illegible]

## 2000 KILOMETERS

[illegible]

**2500 KILOMETERS**

[illegible]

**2750 KILOMETERS**

[illegible]

TABLE B-20 (90 DEG. 90 DEG. 3 HRS)

## 0 KILOMETERS

[illegible]

## 500 KILOMETERS

[illegible]

750 KILOMETERS

[illegible]

1000 KILOMETERS

[illegible]

TABLE B-20 (90 DEG. 90 DEG. 3 HRS) (continued)

**1500 KILOMETERS**

[illegible]

## 2000 KILOMETERS

[illegible]

2500 KILOMETERS

[illegible]

2750 KILOMETERS

[illegible]



## **APPENDIX C.**

### **Expected Values of Minimum PDOP Values**

Three sets of results are presented, namely expected value of minimum PDOP, standard deviation of the minimum PDOP, and the event probability. The event probability is the relative frequency of the occurrence of the pertinent observation set. The values in parentheses in each of the titles define the latitude of the target, the inclination of the orbital plane, and the satellite period. The data is organized by target elevation, by number of slant range observations used to calculate PDOP, and by CONST. CONST=1, 2, 3, or 4 correspond to 9, 12, 15, or 18 satellites.

TABLE C-1 (30 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.45	.00	.00	3.69	.00	.00	.36	.00	.00
2	2.55	2.25	.00	1.86	.67	.00	.95	.22	.00
3	2.93	2.57	1.84	2.49	2.48	.29	1.00	.83	.04
4	2.29	1.97	1.90	.59	.61	.71	1.00	1.00	.75

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.89	3.60	4.70	3.47	.98	.00	.71	.38	.00
2	2.26	2.03	1.80	.89	.45	.19	1.00	.73	.31
3	2.44	2.08	1.65	1.73	1.57	.24	1.00	1.00	.81
4	2.15	1.85	1.69	.44	.44	.45	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.76	3.48	3.34	2.72	1.43	1.69	1.00	.70	.18
2	2.12	1.95	1.72	.42	.39	.20	1.00	.98	.78
3	2.15	1.84	1.64	.89	.78	.23	1.00	1.00	.97
4	2.07	1.76	1.58	.30	.25	.24	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.54	3.16	3.49	2.08	1.50	1.86	1.00	.92	.44
2	2.10	1.88	1.66	.42	.41	.20	1.00	1.00	.91
3	2.05	1.83	1.59	.73	1.20	.24	1.00	1.00	.99
4	1.97	1.70	1.53	.30	.25	.24	1.00	1.00	1.00

TABLE C-2 (30 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.57	.00	.00	3.66	.00	.00	.54	.03	.00
2	4.79	4.14	8.15	3.98	4.18	****	.92	.38	.02
3	3.62	3.72	3.33	3.41	3.76	4.18	1.00	.74	.34
4	3.16	2.84	2.39	3.15	2.79	2.69	1.00	1.00	.72

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.88	4.69	5.04	3.34	3.41	2.69	1.00	.38	.14
2	3.93	3.54	4.20	3.25	3.17	3.77	1.00	1.00	.42
3	2.73	2.48	2.31	1.38	1.25	1.18	1.00	1.00	1.00
4	2.90	2.57	2.39	2.80	2.45	2.15	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.29	3.51	4.17	2.47	2.74	3.23	1.00	.66	.34
2	3.84	3.25	3.02	3.18	2.80	2.70	1.00	1.00	.79
3	2.54	2.33	2.16	1.27	1.23	1.21	1.00	1.00	1.00
4	2.44	2.20	2.06	1.49	1.56	1.48	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.72	2.69	2.94	1.64	1.74	2.08	1.00	.78	.47
2	3.43	2.93	2.68	2.67	2.34	2.27	1.00	1.00	.89
3	2.44	2.16	2.00	1.18	1.11	1.10	1.00	1.00	1.00
4	2.32	2.08	1.98	1.46	1.47	1.73	1.00	1.00	1.00

TABLE C-3 (30 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3.10	.00	.00	2.47	.00	.00	.27	.00	.00
3	3.45	3.26	.00	1.91	2.31	.00	.46	.14	.00
4	2.62	2.46	.00	1.48	1.14	.00	.77	.27	.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	6.07	.00	.00	3.95	.00	.00	.10	.00	.00
2	3.54	2.66	.00	2.66	.68	.00	.84	.06	.00
3	3.78	3.25	.00	2.21	1.96	.00	.98	.60	.00
4	3.10	2.63	2.10	1.84	1.24	.65	1.00	.92	.38

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	5.20	2.94	.00	3.10	.20	.00	.48	.08	.00
2	3.46	3.00	2.25	2.21	1.48	.49	1.00	.51	.07
3	3.45	3.13	2.15	2.16	2.14	.45	1.00	.99	.40
4	2.61	2.34	2.17	.68	.60	.60	1.00	1.00	.93

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.35	2.73	.00	2.26	.30	.00	.66	.22	.00
2	3.12	2.57	1.95	1.82	.86	.37	1.00	.71	.24
3	2.94	2.58	2.13	1.36	1.20	.46	1.00	1.00	.72
4	2.49	2.21	2.06	.60	.53	.49	1.00	1.00	1.00

TABLE C-4 (30 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	6.53	5.11	.00	3.57	3.47	.00	.13	.05	.00
3	3.38	2.66	.00	3.44	.46	.00	.58	.01	.00
4	3.36	2.51	.00	2.24	1.73	.00	.56	.29	.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.70	.00	.00	4.43	.00	.00	.40	.00	.00
2	7.23	6.05	.00	5.26	4.03	.00	.71	.22	.00
3	3.89	3.03	3.04	3.99	1.63	.92	.98	.52	.14
4	4.74	4.36	2.15	4.14	3.96	.99	.98	.97	.37

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	5.21	5.35	2.50	4.02	4.31	.00	.79	.15	.01
2	5.88	6.18	7.82	4.21	4.28	4.94	.96	.75	.15
3	3.54	3.24	3.26	2.21	2.03	2.03	1.00	.93	.71
4	3.76	3.34	3.11	2.92	2.86	2.64	1.00	1.00	.96

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.67	4.20	2.34	3.26	3.02	.18	.98	.28	.08
2	5.30	5.42	5.64	4.38	4.49	4.88	.99	.97	.28
3	2.86	2.59	2.47	.99	.84	.80	1.00	1.00	.96
4	3.21	2.80	2.58	2.81	2.57	2.30	1.00	1.00	.99

TABLE C-5 (45 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.49	2.66	.00	4.16	.19	.00	.32	.02	.00
2	2.57	2.53	.00	1.98	1.15	.00	.92	.22	.00
3	2.78	2.23	1.89	2.00	1.83	.63	1.00	.83	.14
4	2.50	2.18	2.17	1.02	1.02	1.25	1.00	.98	.64

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.52	2.39	1.90	3.48	.81	.00	.95	.38	.01
2	2.24	2.05	1.74	.80	.82	.44	1.00	.88	.60
3	2.32	1.94	1.71	1.06	.92	.52	1.00	1.00	.96
4	2.18	1.86	1.67	.56	.51	.50	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.54	2.19	1.78	1.56	.73	.15	1.00	.81	.23
2	2.22	1.97	1.76	.83	.80	.48	1.00	1.00	.94
3	2.22	1.86	1.71	.60	.56	.54	1.00	1.00	1.00
4	2.15	1.84	1.64	.58	.53	.50	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.40	2.15	1.78	.98	.77	.22	1.00	.92	.49
2	2.14	1.88	1.79	.62	.61	.51	1.00	1.00	1.00
3	2.19	1.84	1.67	.66	.55	.54	1.00	1.00	1.00
4	2.11	1.81	1.61	.51	.49	.45	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.34	2.17	1.86	.85	.82	.45	1.00	1.00	.82
2	2.16	1.87	1.78	.61	.60	.57	1.00	1.00	1.00
3	2.19	1.84	1.68	.77	.59	.57	1.00	1.00	1.00
4	2.14	1.82	1.63	.62	.57	.49	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.35	2.17	1.89	.96	.94	.63	1.00	1.00	.95
2	2.22	1.92	1.79	.79	.75	.73	1.00	1.00	1.00
3	2.23	1.87	1.70	.93	.67	.67	1.00	1.00	1.00
4	2.19	1.86	1.66	.80	.72	.62	1.00	1.00	1.00

TABLE C-6 (45 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.76	2.88	.00	3.49	.30	.00	.84	.03	.00
2	4.02	3.56	2.58	3.32	3.22	.31	1.00	.77	.04
3	3.30	3.17	2.91	2.77	2.87	2.61	1.00	.96	.73
4	3.20	2.90	2.69	2.99	2.71	2.46	1.00	1.00	.98

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.35	2.83	1.55	3.10	2.39	.09	1.00	.58	.05
2	3.31	2.93	2.57	2.81	2.73	2.00	1.00	1.00	.75
3	2.94	2.69	2.45	2.47	2.45	2.22	1.00	1.00	1.00
4	2.91	2.59	2.35	2.63	2.36	2.04	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.28	3.15	2.44	2.90	2.85	2.02	1.00	.88	.27
2	3.30	2.99	2.68	2.76	2.93	2.64	1.00	1.00	.94
3	2.75	2.42	2.23	1.48	1.36	1.28	1.00	1.00	1.00
4	2.82	2.45	2.24	2.47	2.16	1.92	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.14	2.95	2.94	2.53	2.60	2.54	1.00	.98	.45
2	3.21	2.93	2.63	2.67	2.81	2.52	1.00	1.00	.97
3	2.70	2.40	2.21	1.47	1.38	1.33	1.00	1.00	1.00
4	2.60	2.21	2.06	2.08	1.67	1.66	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.93	2.64	2.50	2.02	2.00	2.14	1.00	1.00	.78
2	3.22	2.74	2.53	2.36	2.10	2.02	1.00	1.00	1.00
3	2.57	2.27	2.10	1.45	1.34	1.33	1.00	1.00	1.00
4	2.50	2.16	1.94	1.72	1.44	1.27	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.88	2.54	2.42	1.97	1.79	1.81	1.00	1.00	.89
2	2.88	2.55	2.35	1.99	2.08	1.95	1.00	1.00	1.00
3	2.32	2.04	1.86	.70	.61	.60	1.00	1.00	1.00
4	2.48	2.13	1.94	1.61	1.35	1.30	1.00	1.00	1.00

TABLE C-7 (45 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3.36	.00	.00	2.91	.00	.00	.24	.00	.00
3	3.15	4.58	.00	2.49	3.49	.00	.46	.08	.00
4	2.87	3.27	1.57	2.06	2.70	.12	.84	.23	.01

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	6.34	.00	.00	2.99	.00	.00	.08	.00	.00
2	2.79	3.34	.00	1.96	2.62	.00	.82	.07	.00
3	2.95	2.68	6.63	2.38	2.36	5.14	.99	.68	.02
4	2.61	2.33	2.86	1.70	1.75	3.29	1.00	.89	.37

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	6.17	2.94	.00	4.58	1.09	.00	.50	.07	.00
2	2.96	2.79	1.53	2.20	2.06	.09	.99	.53	.10
3	2.86	2.42	2.19	2.17	1.83	1.34	1.00	.96	.55
4	2.66	2.33	2.21	1.75	1.65	1.65	1.00	1.00	.94

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.85	2.61	.00	4.07	1.05	.00	.76	.25	.00
2	2.75	2.46	1.86	1.63	1.42	.79	1.00	.84	.33
3	2.69	2.26	1.97	1.76	1.48	.85	1.00	1.00	.86
4	2.44	2.14	1.97	1.19	1.06	1.01	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.61	2.25	1.64	3.54	.71	.09	.98	.70	.06
2	2.41	2.17	1.80	.74	.74	.49	1.00	1.00	.83
3	2.28	2.01	1.86	.63	.59	.55	1.00	1.00	1.00
4	2.24	1.94	1.77	.70	.58	.52	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.02	2.09	1.60	2.49	.55	.14	1.00	.86	.32
2	2.21	1.95	1.73	.46	.42	.34	1.00	1.00	.97
3	2.14	1.86	1.69	.37	.34	.34	1.00	1.00	1.00
4	2.09	1.81	1.63	.43	.33	.30	1.00	1.00	1.00



TABLE C-8 (45 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.63	.00	.00	3.02	.00	.00	.18	.00	.00
2	5.25	1.74	.00	4.63	2.81	.00	.36	.09	.00
3	4.55	3.98	.00	4.60	4.67	.00	.84	.17	.05
4	4.75	3.36	3.42	3.90	3.56	5.48	.98	.58	.07

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.95	.00	.00	3.58	.00	.00	.74	.00	.00
2	4.82	3.90	.00	3.57	2.83	.00	.93	.64	.00
3	3.84	3.55	3.24	3.20	2.90	2.57	1.00	.89	.58
4	3.71	3.11	2.99	2.84	2.52	2.32	1.00	1.00	.87

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.70	3.14	1.50	3.61	1.06	.00	.99	.20	.00
2	4.26	3.43	2.69	3.38	2.54	.80	1.00	.99	.27
3	3.81	3.34	3.03	3.41	2.93	2.68	1.00	1.00	.98
4	3.76	3.17	2.90	3.34	2.90	2.54	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.43	3.29	1.42	3.21	2.27	.10	.99	.48	.04
2	3.94	3.31	2.80	3.19	2.56	1.78	1.00	1.00	.59
3	3.37	2.99	2.74	2.78	2.45	2.23	1.00	1.00	1.00
4	3.34	2.86	2.63	2.61	2.31	2.11	1.00	1.00	1.00

TABLE C-8 (45 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	5.08	3.96	1.54	3.98	3.50	.21	1.00	.79	.16
2	3.90	3.56	3.12	3.35	3.21	2.81	1.00	1.00	.89
3	3.25	2.93	2.71	2.46	2.22	2.07	1.00	1.00	1.00
4	3.35	2.91	2.67	3.06	2.67	2.37	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.46	3.21	1.90	2.88	2.55	.66	.99	.92	.36
2	3.31	3.21	2.80	3.32	3.50	2.66	1.00	1.00	.97
3	2.51	2.26	2.11	.87	.80	.76	1.00	1.00	1.00
4	2.69	2.32	2.13	2.16	1.93	1.69	1.00	1.00	1.00

TABLE C-9 (60 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.83	3.50	.00	2.65	.90	.00	.62	.03	.00
2	2.56	2.28	2.13	1.77	1.56	.14	1.00	.53	.01
3	2.75	2.25	1.82	2.22	1.81	.84	1.00	.97	.44
4	2.65	2.37	2.21	1.86	1.81	1.87	1.00	1.00	.92

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.63	2.50	1.89	2.09	1.66	.39	1.00	.55	.03
2	2.54	2.23	2.10	1.66	1.62	1.17	1.00	1.00	.70
3	2.50	2.11	1.92	1.25	1.19	1.15	1.00	1.00	1.00
4	2.38	2.09	1.88	1.24	1.09	1.04	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.54	2.50	2.40	1.64	1.70	1.24	1.00	.86	.26
2	2.40	2.08	2.05	1.18	1.10	1.09	1.00	1.00	.91
3	2.47	2.07	1.88	1.30	1.12	1.09	1.00	1.00	1.00
4	2.35	2.06	1.83	1.13	1.04	.92	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.58	2.47	2.57	1.80	1.78	1.41	1.00	.96	.46
2	2.50	2.13	2.06	1.45	1.28	1.22	1.00	1.00	1.00
3	2.51	2.12	1.91	1.44	1.21	1.15	1.00	1.00	1.00
4	2.45	2.12	1.89	1.37	1.23	1.08	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.87	2.68	2.80	2.48	2.37	2.52	1.00	1.00	.78
2	2.83	2.42	2.33	2.56	2.15	2.06	1.00	1.00	1.00
3	2.84	2.42	2.17	2.47	2.16	1.93	1.00	1.00	1.00
4	2.81	2.41	2.15	2.48	2.13	1.91	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.84	2.57	2.44	2.59	2.33	2.20	1.00	1.00	.94
2	2.66	2.36	2.22	2.39	2.22	2.03	1.00	1.00	1.00
3	2.85	2.29	2.11	2.68	2.07	1.98	1.00	1.00	1.00
4	2.63	2.31	2.06	2.28	2.15	1.87	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.95	2.73	2.56	2.52	2.40	2.31	1.00	1.00	1.00
2	2.85	2.46	2.36	2.57	2.18	2.10	1.00	1.00	1.00
3	2.90	2.42	2.19	2.49	2.18	1.96	1.00	1.00	1.00
4	2.83	2.42	2.17	2.51	2.16	1.94	1.00	1.00	1.00

TABLE C-10 (60 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.47	1.65	.00	3.18	.09	.00	.97	.06	.00
2	4.05	3.05	1.50	3.70	2.72	.00	1.00	.97	.07
3	3.58	3.01	2.87	3.05	2.47	2.89	1.00	1.00	.96
4	3.20	2.90	2.98	2.61	2.36	2.98	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.08	2.01	1.67	2.54	.60	.21	1.00	.59	.13
2	3.53	3.04	1.75	3.32	3.22	.35	1.00	1.00	.68
3	3.30	2.73	2.65	2.98	2.41	2.78	1.00	1.00	1.00
4	2.97	2.64	2.70	2.53	2.30	2.93	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.92	2.16	1.92	2.44	.74	.48	1.00	.81	.36
2	3.19	2.86	1.96	2.95	3.05	.66	1.00	1.00	.86
3	3.02	2.55	2.53	2.88	2.31	2.74	1.00	1.00	1.00
4	2.80	2.46	2.53	2.41	2.19	2.86	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.91	2.48	1.94	2.37	1.66	.53	1.00	.90	.51
2	3.01	2.72	2.30	2.41	2.67	1.52	1.00	1.00	.95
3	2.79	2.45	2.34	2.29	1.99	2.25	1.00	1.00	1.00
4	2.74	2.49	2.26	2.21	2.39	2.10	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.08	2.84	2.24	2.32	2.19	1.11	1.00	1.00	.69
2	3.20	2.71	2.52	2.52	2.33	2.13	1.00	1.00	1.00
3	2.72	2.42	2.19	1.38	1.23	1.15	1.00	1.00	1.00
4	2.74	2.37	2.15	1.99	1.74	1.54	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.23	2.96	2.66	2.22	2.11	1.81	1.00	1.00	.82
2	3.34	2.81	2.59	2.65	2.38	2.13	1.00	1.00	1.00
3	2.83	2.52	2.30	1.49	1.36	1.30	1.00	1.00	1.00
4	2.82	2.43	2.21	1.69	1.44	1.33	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.20	2.92	2.74	2.03	1.97	2.02	1.00	1.00	.89
2	3.55	2.99	2.77	2.66	2.29	2.17	1.00	1.00	1.00
3	2.93	2.58	2.35	1.76	1.56	1.48	1.00	1.00	1.00
4	2.88	2.48	2.30	1.88	1.61	1.86	1.00	1.00	1.00

TABLE C-11 (60 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	3.63	.00	.00	3.81	.00	.00	.21	.00	.00
3	2.97	6.92	.00	2.31	5.89	.00	.60	.03	.00
4	3.62	3.17	.00	2.59	3.69	.00	.90	.22	.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.25	.00	.00	3.21	.00	.00	.36	.00	.00
2	2.81	2.27	.00	2.10	1.15	.00	.95	.26	.00
3	3.08	2.74	1.60	2.71	2.66	.71	1.00	.87	.14
4	2.68	2.38	2.25	1.53	1.51	1.39	1.00	.99	.74

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.48	2.22	.00	3.03	.66	.00	.88	.16	.00
2	2.56	2.14	1.99	1.55	.87	.45	1.00	.88	.21
3	2.60	2.22	1.87	1.99	1.70	.61	1.00	1.00	.89
4	2.29	2.01	1.86	.85	.81	.77	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.28	2.27	1.70	2.90	.57	.00	.99	.41	.00
2	2.40	2.10	1.91	.82	.71	.39	1.00	.98	.56
3	2.25	1.94	1.83	.62	.52	.50	1.00	1.00	1.00
4	2.17	1.87	1.71	.56	.50	.44	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.62	2.11	1.83	1.97	.45	.16	1.00	.73	.16
2	2.14	1.88	1.75	.33	.28	.27	1.00	1.00	.85
3	2.06	1.77	1.63	.35	.28	.24	1.00	1.00	1.00
4	1.98	1.72	1.56	.29	.28	.22	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.19	1.90	1.70	.39	.29	.12	1.00	.89	.36
2	2.00	1.75	1.59	.19	.16	.14	1.00	1.00	.96
3	1.99	1.68	1.52	.20	.14	.12	1.00	1.00	1.00
4	1.91	1.64	1.47	.16	.14	.12	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.02	1.77	1.63	.36	.15	.09	1.00	.97	.51
2	1.94	1.66	1.51	.11	.12	.11	1.00	1.00	1.00
3	1.93	1.64	1.47	.13	.09	.09	1.00	1.00	1.00
4	1.85	1.61	1.44	.11	.10	.10	1.00	1.00	1.00

TABLE C-12 (60 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.91	.00	.00	2.67	.00	.00	.42	.00	.00
2	3.99	5.31	.00	3.25	4.72	.00	.60	.34	.00
3	3.60	4.75	4.78	2.84	4.66	4.29	.92	.45	.32
4	3.62	3.91	4.39	2.80	3.89	4.25	.98	.75	.38

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.78	.00	.00	3.15	.00	.00	.89	.00	.00
2	3.65	3.64	.00	3.15	3.76	.00	.98	.86	.00
3	3.31	3.62	3.22	2.62	3.69	3.19	1.00	.97	.82
4	3.75	3.40	3.12	3.44	3.46	3.09	1.00	1.00	.95

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.72	2.30	1.81	3.10	.68	.20	1.00	.29	.03
2	3.63	3.54	1.91	3.19	3.54	.71	1.00	1.00	.38
3	3.09	3.35	3.00	2.23	3.38	2.85	1.00	1.00	1.00
4	3.08	3.23	2.96	2.04	3.29	2.94	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.50	2.39	1.97	2.66	.61	.47	.99	.50	.10
2	3.45	3.43	2.00	3.02	3.47	.61	1.00	1.00	.61
3	2.97	3.22	2.86	2.10	3.33	2.81	1.00	1.00	1.00
4	2.93	3.11	2.84	1.92	3.27	2.91	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.14	2.39	1.96	2.06	.48	.45	1.00	.74	.25
2	3.00	3.12	1.97	2.22	3.30	.41	1.00	1.00	.80
3	2.84	3.08	2.74	2.07	3.39	2.92	1.00	1.00	1.00
4	2.79	3.01	2.71	1.93	3.33	2.97	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.92	2.30	1.80	1.92	.55	.28	1.00	.84	.42
2	2.77	3.01	1.96	2.18	3.45	.54	1.00	1.00	.89
3	2.60	2.88	2.62	1.90	3.50	3.08	1.00	1.00	1.00
4	2.55	2.84	2.54	1.83	3.46	3.10	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.88	2.41	1.65	2.13	1.56	.17	1.00	.93	.51
2	2.70	2.35	2.15	2.12	1.89	1.54	1.00	1.00	.97
3	2.46	2.13	2.19	1.63	1.52	2.27	1.00	1.00	1.00
4	2.54	2.23	1.99	1.81	1.67	1.49	.99	1.00	1.00

TABLE C-13 (75 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.34	7.45	.00	1.92	1.65	.00	.84	.01	.00
2	2.89	2.14	4.17	2.49	2.23	.45	1.00	.80	.01
3	2.82	2.38	1.71	2.58	2.06	1.22	1.00	.99	.76
4	2.74	2.46	2.28	2.59	2.47	2.50	1.00	1.00	.99

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.64	3.67	4.34	2.24	3.25	2.46	1.00	.47	.19
2	2.91	2.33	3.05	2.13	1.88	2.30	1.00	1.00	.49
3	2.78	2.40	2.05	1.99	1.75	1.65	1.00	1.00	1.00
4	2.64	2.34	2.11	2.00	1.75	1.59	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.75	3.48	4.33	2.31	3.33	3.77	1.00	.63	.38
2	2.98	2.54	2.97	2.58	2.55	2.87	1.00	1.00	.65
3	2.89	2.63	2.25	2.33	2.60	2.28	1.00	1.00	1.00
4	2.74	2.57	2.32	2.30	2.54	2.29	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.73	2.93	3.24	2.41	2.59	2.86	1.00	.73	.49
2	2.85	2.38	2.50	2.61	2.09	2.23	1.00	1.00	.75
3	2.87	2.42	2.43	2.41	2.15	2.87	1.00	1.00	1.00
4	2.73	2.39	2.46	2.41	2.09	2.90	1.00	1.00	1.00

TABLE C-13 (75 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.85	2.87	3.33	2.44	2.53	3.40	1.00	.87	.65
2	2.97	2.46	2.65	2.74	2.11	2.69	1.00	1.00	.89
3	2.97	2.50	2.34	2.45	2.20	2.42	1.00	1.00	1.00
4	2.83	2.48	2.35	2.44	2.10	2.45	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.54	2.45	2.48	1.52	1.47	1.58	1.00	.97	.76
2	2.67	2.20	2.12	1.70	1.32	1.26	1.00	1.00	.99
3	2.65	2.23	1.95	1.52	1.38	1.20	1.00	1.00	1.00
4	2.52	2.22	1.95	1.53	1.32	1.20	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.30	2.19	2.09	.98	.93	.97	1.00	1.00	.90
2	2.42	1.98	1.92	1.10	.85	.80	1.00	1.00	1.00
3	2.40	2.02	1.75	.97	.89	.76	1.00	1.00	1.00
4	2.27	2.01	1.77	.98	.85	.78	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.21	2.11	1.98	.80	.76	.78	1.00	1.00	.95
2	2.33	1.90	1.84	.92	.70	.67	1.00	1.00	1.00
3	2.32	1.95	1.69	.80	.74	.63	1.00	1.00	1.00
4	2.19	1.93	1.71	.82	.71	.65	1.00	1.00	1.00



TABLE C-14 (75 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.20	2.33	.00	2.64	.83	.00	1.00	.12	.00
2	3.62	3.00	2.01	3.35	3.10	.64	1.00	1.00	.14
3	3.46	3.21	2.73	2.83	3.17	2.61	1.00	1.00	1.00
4	3.10	3.14	2.85	2.47	3.10	2.80	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.92	2.15	2.52	2.22	.76	.73	1.00	.48	.25
2	3.39	2.84	1.91	2.71	2.73	.63	1.00	1.00	.49
3	3.29	3.03	2.52	2.65	2.98	2.44	1.00	1.00	1.00
4	2.92	2.95	2.63	2.21	2.88	2.57	.99	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.27	2.14	2.33	3.09	.83	.90	1.00	.60	.39
2	3.38	2.83	1.87	2.65	2.67	.70	1.00	1.00	.63
3	3.28	3.02	2.52	2.61	2.93	2.39	1.00	1.00	1.00
4	3.28	2.93	2.64	3.11	2.82	2.51	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.28	2.21	2.27	3.04	.96	1.05	1.00	.69	.49
2	3.39	2.83	1.93	2.66	2.63	.83	1.00	1.00	.72
3	3.27	3.00	2.53	2.55	2.87	2.36	.99	1.00	1.00
4	3.28	2.91	2.62	3.05	2.76	2.49	1.00	1.00	1.00

TABLE C-14 (75 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.37	2.45	2.40	3.04	1.43	1.55	1.00	.81	.63
2	3.40	2.90	2.15	2.73	2.63	1.25	1.00	1.00	.84
3	3.23	3.03	2.57	2.61	2.85	2.35	1.00	1.00	1.00
4	3.34	2.94	2.65	3.04	2.76	2.48	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.45	2.88	2.61	3.21	2.36	2.49	1.00	.91	.72
2	3.33	2.96	2.52	2.89	2.78	2.04	1.00	1.00	.93
3	3.13	3.00	2.61	2.68	2.94	2.47	1.00	1.00	1.00
4	3.31	2.87	2.59	3.12	2.78	2.52	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.54	3.17	2.77	3.41	3.14	3.09	1.00	.98	.79
2	3.26	2.98	2.83	2.53	2.84	2.81	1.00	1.00	.99
3	3.33	3.10	2.81	3.16	3.18	3.00	1.00	1.00	1.00
4	3.25	2.78	2.72	3.08	2.66	2.81	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.41	3.18	2.72	2.87	2.74	2.46	1.00	1.00	.83
2	3.30	2.97	2.81	2.48	2.82	2.77	1.00	1.00	1.00
3	3.25	2.85	2.53	2.59	2.29	2.04	1.00	1.00	1.00
4	3.11	2.92	2.62	2.65	2.91	2.54	1.00	1.00	1.00

TABLE C-15 (75 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	1.89	.00	.00	.07	.00	.00	.32	.00	.00
2	2.09	1.53	.00	.33	.07	.00	.48	.29	.00
3	2.70	1.64	1.37	1.26	.15	.09	.61	.41	.28
4	3.24	1.87	1.43	2.71	.49	.11	.69	.54	.37

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.09	.00	.00	2.32	.00	.00	.71	.00	.00
2	4.38	2.39	.00	4.26	1.16	.00	.94	.64	.00
3	4.02	3.64	2.00	4.04	3.53	.79	.99	.88	.61
4	4.46	3.78	2.93	4.29	3.59	2.30	1.00	.98	.79

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.88	3.04	.00	3.45	.48	.00	.99	.20	.00
2	3.42	2.97	2.62	2.16	1.79	.16	1.00	.99	.26
3	3.25	2.87	2.61	1.98	1.72	1.54	1.00	1.00	1.00
4	3.20	2.79	2.53	1.83	1.59	1.41	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.13	2.58	2.04	1.94	.51	.09	1.00	.41	.10
2	2.88	2.49	2.16	1.30	1.08	.25	1.00	1.00	.44
3	2.73	2.38	2.14	.99	.88	.79	1.00	1.00	1.00
4	2.64	2.30	2.05	.82	.72	.63	1.00	1.00	1.00

TABLE C-15 (75 DEG, 60 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.73	2.03	1.76	1.17	.19	.09	1.00	.56	.30
2	2.51	2.18	1.77	.67	.55	.15	1.00	1.00	.59
3	2.46	2.11	1.89	.56	.51	.46	1.00	1.00	1.00
4	2.38	2.05	1.83	.53	.46	.41	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.79	1.84	1.64	1.45	.16	.09	1.00	.66	.42
2	2.52	2.19	1.62	.91	.79	.14	1.00	1.00	.69
3	2.45	2.15	1.93	.79	.69	.65	1.00	1.00	1.00
4	2.39	2.06	1.86	.76	.62	.57	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.21	1.75	1.50	2.56	.11	.03	1.00	.73	.51
2	2.92	2.53	1.52	1.94	1.73	.11	1.00	1.00	.76
3	2.76	2.39	2.16	1.61	1.46	1.35	1.00	1.00	1.00
4	2.70	2.30	2.10	1.64	1.41	1.26	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.43	1.72	1.50	3.67	.13	.00	1.00	.77	.55
2	3.52	3.06	1.49	3.51	3.15	.13	1.00	1.00	.80
3	3.40	2.91	2.64	3.21	2.86	2.69	1.00	1.00	1.00
4	3.23	2.77	2.53	3.08	2.64	2.39	1.00	1.00	1.00

TABLE C-16 (75 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.45	.00	.00	3.31	.00	.00	.58	.00	.00
2	3.70	2.95	.00	3.83	2.95	.00	.68	.57	.00
3	3.72	3.01	2.66	3.48	3.04	2.63	.78	.64	.56
4	4.16	2.86	2.65	3.94	2.80	2.68	.86	.70	.62

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.37	.00	.00	4.06	.00	.00	.98	.00	.00
2	4.32	3.44	.00	3.99	3.05	.00	1.00	.97	.00
3	3.83	3.34	2.89	2.98	2.48	2.10	1.00	1.00	.97
4	3.59	3.18	2.89	2.55	2.36	2.13	1.00	1.00	.99

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.23	3.05	2.56	2.40	.51	.18	1.00	.31	.08
2	3.33	2.77	2.62	2.77	2.22	.41	1.00	1.00	.35
3	3.20	2.75	2.41	2.65	2.15	1.77	1.00	1.00	1.00
4	3.06	2.61	2.39	2.25	2.04	1.83	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.09	2.55	2.32	2.15	.38	.21	.99	.43	.21
2	3.16	2.52	2.14	2.64	1.89	.28	1.00	1.00	.45
3	2.96	2.53	2.23	2.55	2.06	1.69	1.00	1.00	1.00
4	2.85	2.47	2.23	2.18	1.97	1.77	1.00	1.00	1.00

TABLE C-16 (75 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.86	2.08	1.88	2.04	.23	.16	.99	.55	.34
2	2.90	2.32	1.76	2.47	1.78	.17	1.00	1.00	.57
3	2.71	2.34	2.06	2.36	1.92	1.59	1.00	1.00	1.00
4	2.63	2.25	2.07	2.05	1.85	1.67	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.69	1.88	1.66	2.00	.19	.08	1.00	.64	.43
2	2.75	2.21	1.58	2.35	1.72	.10	1.00	1.00	.66
3	2.56	2.22	1.97	2.22	1.84	1.55	1.00	1.00	1.00
4	2.51	2.16	1.97	1.99	1.76	1.61	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.63	1.78	1.54	2.05	.19	.09	1.00	.71	.50
2	2.68	2.16	1.53	2.33	1.77	.08	1.00	1.00	.73
3	2.50	2.17	1.92	2.16	1.82	1.57	1.00	1.00	1.00
4	2.45	2.10	1.92	2.04	1.78	1.60	.99	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.59	1.75	1.51	2.06	.21	.09	1.00	.77	.57
2	2.68	2.17	1.50	2.39	1.85	.04	1.00	1.00	.77
3	2.48	2.17	1.93	2.21	1.86	1.65	1.00	1.00	1.00
4	2.45	2.11	1.92	2.12	1.86	1.65	.99	1.00	1.00

TABLE C-17 (90 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.28	.00	.00	1.05	.00	.00	.98	.00	.00
2	2.80	1.96	.00	1.26	.89	.00	.98	.98	.00
3	2.52	2.18	1.75	1.02	.97	.81	.98	.98	.98
4	2.28	2.07	1.91	1.05	.89	.84	.98	.98	.98

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.73	6.34	6.09	2.31	4.29	4.16	1.00	.23	.23
2	3.34	2.54	5.48	2.82	2.53	3.76	1.00	1.00	.23
3	2.98	2.79	2.25	2.31	2.65	2.27	1.00	1.00	1.00
4	2.73	2.62	2.43	2.31	2.50	2.32	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.74	4.03	3.75	2.45	3.25	3.11	1.00	.39	.39
2	3.22	2.38	3.51	2.90	2.11	2.83	1.00	1.00	.39
3	2.98	2.61	2.45	2.45	2.29	2.90	1.00	1.00	1.00
4	2.74	2.46	2.63	2.45	2.09	3.04	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.81	3.66	3.36	2.52	3.15	2.97	1.00	.49	.49
2	3.22	2.46	3.19	2.97	2.19	2.74	1.00	1.00	.49
3	3.02	2.64	2.52	2.57	2.36	3.03	1.00	1.00	1.00
4	2.81	2.50	2.31	2.52	2.18	2.05	1.00	1.00	1.00

TABLE C-17 (90 DEG, 60 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.70	3.16	2.96	2.00	2.26	2.21	1.00	.63	.63
2	3.17	2.34	2.74	2.38	1.73	1.97	1.00	1.00	.63
3	2.88	2.56	2.08	2.03	1.83	1.55	1.00	1.00	1.00
4	2.70	2.39	2.24	2.00	1.72	1.59	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.36	2.46	2.35	1.19	1.25	1.24	1.00	.74	.74
2	2.79	2.05	2.15	1.41	1.02	1.10	1.00	1.00	.74
3	2.52	2.24	1.82	1.20	1.10	.91	1.00	1.00	1.00
4	2.36	2.10	1.95	1.19	1.03	.93	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.17	2.15	2.06	.79	.83	.81	1.00	.83	.83
2	2.57	1.89	1.88	.98	.68	.74	1.00	1.00	.83
3	2.32	2.04	1.68	.81	.74	.62	1.00	1.00	1.00
4	2.17	1.94	1.79	.79	.69	.64	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.11	2.05	1.95	.68	.72	.67	1.00	.86	.86
2	2.49	1.84	1.78	.82	.59	.60	1.00	1.00	.86
3	2.25	1.98	1.63	.70	.64	.53	1.00	1.00	1.00
4	2.11	1.89	1.73	.68	.59	.54	1.00	1.00	1.00



TABLE C-18 (90 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.88	3.58	3.26	2.21	.25	.15	1.00	.04	.04
2	3.53	2.80	3.10	2.74	2.74	.23	1.00	1.00	.04
3	3.33	3.07	2.50	2.67	2.99	2.45	1.00	1.00	1.00
4	2.88	2.62	2.37	2.26	2.06	1.85	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.24	2.77	2.68	2.99	.92	.88	1.00	.28	.28
2	3.59	2.80	2.42	2.66	2.59	.82	.94	1.00	.28
3	3.33	3.08	2.50	2.54	2.83	2.32	1.00	1.00	1.00
4	3.32	2.93	2.66	3.06	2.73	2.44	.93	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.25	2.58	2.46	2.93	1.12	1.11	1.00	.41	.41
2	3.66	2.82	2.25	2.65	2.54	1.00	.89	1.00	.41
3	3.34	3.09	2.52	2.49	2.78	2.27	1.00	1.00	1.00
4	3.57	2.96	2.67	3.08	2.68	2.39	.81	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.30	2.58	2.46	2.90	1.37	1.35	1.00	.49	.49
2	3.58	2.87	2.26	2.64	2.50	1.23	.93	1.00	.49
3	3.39	3.12	2.56	2.48	2.74	2.26	1.00	1.00	1.00
4	3.57	2.99	2.70	3.02	2.62	2.36	.82	1.00	1.00

TABLE C-18 (90 DEG, 90 DEG, 6 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.51	2.85	2.75	3.15	2.40	2.35	1.00	.61	.61
2	3.73	3.05	2.50	3.00	2.72	2.14	.96	1.00	.61
3	3.60	3.30	2.73	2.84	2.95	2.45	1.00	1.00	1.00
4	3.51	3.15	2.85	3.18	2.82	2.56	.88	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.46	2.67	2.49	3.24	2.54	2.31	1.00	.71	.71
2	4.18	3.00	2.34	3.99	2.79	2.24	1.00	1.00	.71
3	3.87	3.22	2.66	3.64	2.97	2.51	1.00	1.00	1.00
4	3.46	3.08	2.79	3.24	2.87	2.59	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.44	2.75	2.62	3.05	2.40	2.35	1.00	.78	.78
2	3.84	2.98	2.42	3.29	2.63	2.14	.97	1.00	.78
3	3.82	3.26	2.65	3.42	2.84	2.36	1.00	1.00	1.00
4	3.33	3.07	2.80	2.98	2.71	2.45	.96	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.16	2.48	2.35	2.59	1.67	1.65	1.00	.81	.81
2	3.70	2.75	2.18	3.09	2.24	1.49	.96	1.00	.81
3	3.55	3.02	2.44	2.98	2.44	2.01	1.00	1.00	1.00
4	3.07	2.85	2.61	2.56	2.33	2.10	.93	1.00	1.00

TABLE C-19 (90 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.53	.00	.00	.97	.00	.00	.65	.00	.00
2	3.09	2.18	.00	1.18	.85	.00	.65	.65	.00
3	2.75	2.37	1.95	.96	.92	.73	.65	.65	.65
4	2.53	2.26	2.04	.98	.83	.81	.65	.65	.65

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.25	.00	.00	3.76	.00	.00	.92	.00	.00
2	4.44	3.69	.00	3.54	3.26	.00	.92	.92	.00
3	4.43	4.03	3.28	3.84	3.56	2.91	.92	.92	.92
4	4.25	3.73	3.47	3.76	3.25	3.09	.92	.92	.92

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.21	2.22	2.02	3.56	.10	.10	1.00	.08	.08
2	5.14	3.65	1.90	4.38	3.10	.00	1.00	1.00	.08
3	4.41	3.99	3.26	3.64	3.38	2.76	1.00	1.00	1.00
4	4.21	3.71	3.44	3.56	3.07	2.89	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.30	1.99	1.83	3.93	.10	.10	1.00	.18	.18
2	4.47	3.72	1.75	3.58	3.38	.09	1.00	1.00	.18
3	4.50	4.06	3.33	4.01	3.71	3.04	1.00	1.00	1.00
4	4.30	3.76	3.50	3.93	3.36	3.21	1.00	1.00	1.00

TABLE C-19 (90 DEG, 60 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.44	1.77	1.62	4.12	.10	.10	1.00	.32	.32
2	4.66	3.83	1.55	4.08	3.58	.09	1.00	1.00	.32
3	4.65	4.22	3.44	4.19	3.91	3.21	1.00	1.00	1.00
4	4.44	3.92	3.64	4.12	3.56	3.37	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.28	1.66	1.52	3.81	.10	.07	1.00	.42	.42
2	5.18	3.71	1.47	4.68	3.29	.07	1.00	1.00	.42
3	4.49	4.06	3.31	3.89	3.62	2.97	1.00	1.00	1.00
4	4.28	3.75	3.49	3.81	3.27	3.12	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	4.18	1.60	1.49	4.64	.10	.05	1.00	.52	.52
2	5.04	4.89	1.41	5.72	5.39	.10	1.00	1.00	.52
3	4.39	4.63	4.35	4.74	5.23	4.81	1.00	1.00	1.00
4	4.18	4.92	4.60	4.64	5.38	5.08	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.50	1.58	1.46	4.53	.10	.08	1.00	.55	.55
2	3.36	3.04	1.39	4.14	3.94	.10	1.00	1.00	.55
3	2.99	3.31	2.71	3.42	4.32	3.54	1.00	1.00	1.00
4	3.50	3.06	2.87	4.53	3.93	3.72	1.00	1.00	1.00

TABLE C-20 (90 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.23	.00	.00	2.54	.00	.00	.82	.00	.00
2	3.95	2.80	.00	3.06	2.20	.00	.82	.82	.00
3	3.65	3.06	2.50	2.97	2.38	1.97	.82	.82	.82
4	3.23	2.93	2.65	2.54	2.29	2.04	.82	.82	.82

## 500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.73	3.10	2.90	3.16	.00	.00	1.00	.02	.02
2	4.56	3.82	2.90	3.89	3.84	.00	1.00	1.00	.02
3	4.10	3.53	3.42	3.41	3.00	3.43	1.00	1.00	1.00
4	3.72	3.93	3.63	3.15	3.84	3.61	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.96	2.46	2.32	4.12	.27	.15	1.00	.15	.15
2	4.16	3.44	2.14	3.82	3.58	.18	.96	1.00	.15
3	4.31	3.75	3.07	4.31	3.90	3.22	1.00	1.00	1.00
4	4.03	3.55	3.27	4.16	3.58	3.37	.97	1.00	1.00

## 1000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	3.39	2.16	2.05	3.34	.23	.16	1.00	.22	.22
2	4.48	3.62	2.07	4.02	3.50	.13	.95	1.00	.12
3	3.72	3.22	2.62	3.55	3.14	2.59	1.00	1.00	1.00
4	3.52	3.02	2.78	3.43	2.91	2.73	.93	1.00	1.00

TABLE C-20 (90 DEG, 90 DEG, 3 HRS) (continued)

## 1500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.71	1.85	1.71	1.74	.16	.16	1.00	.35	.35
2	3.44	2.37	1.61	2.20	1.54	.15	.89	1.00	.35
3	3.03	2.59	2.12	1.96	1.65	1.36	1.00	1.00	1.00
4	2.87	2.47	2.23	1.74	1.56	1.42	.90	1.00	1.00

## 2000 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.37	1.71	1.58	1.25	.14	.10	1.00	.45	.45
2	2.95	2.07	1.51	1.51	1.08	.12	.89	1.00	.45
3	2.62	2.24	1.84	1.41	1.19	.97	1.00	1.00	1.00
4	2.52	2.13	1.92	1.20	1.09	1.01	.88	1.00	1.00

## 2500 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.26	1.63	1.52	1.17	.11	.09	1.00	.52	.52
2	2.81	1.99	1.43	1.45	1.01	.11	.90	1.00	.52
3	2.49	2.13	1.77	1.26	1.10	.92	1.00	1.00	1.00
4	2.43	2.05	1.84	1.10	1.02	.95	.87	1.00	1.00

## 2750 KILOMETERS

CONST	E(PDOP)			SIG(PDOP)			PROB(EVENT)		
	3	4	5	3	4	5	3	4	5
1	2.27	1.60	1.46	1.23	.10	.08	1.00	.55	.55
2	2.80	1.98	1.40	1.56	1.06	.10	.89	1.00	.55
3	2.46	2.03	1.83	1.16	1.06	1.01	.85	1.00	1.00
4	2.48	2.13	1.75	1.31	1.18	.97	1.00	1.00	1.00

## **APPENDIX D.**

### **Expected Values of Shortest Target Tracker to Target Distances**

Three sets of results are presented, namely expected value of shortest distance, standard deviation of the shortest distance, and the event probability. The event probability is the relative frequency of the occurrence of a shortest, next shortest, or third shortest distance. The values in parentheses in each of the titles define the latitude of the target, the inclination of the orbital plane, and the satellite period. The data is organized by target elevation, by first, second, and third shortest distances, and by CONST. CONST=1, 2, 3, or 4 correspond to 9, 12, 15, or 18 satellites.

TABLE D-1 (30 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.69	13.12	14.48	.83	1.11	.31	1.00	1.00	.36
2	11.34	12.63	13.87	.63	.93	.67	1.00	1.00	.95
3	11.31	12.09	13.37	.55	.88	.71	1.00	1.00	1.00
4	11.14	11.97	12.65	.56	.67	.79	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.35	12.91	14.97	.93	1.22	.66	1.00	1.00	.71
2	10.94	12.39	13.83	.70	1.02	.77	1.00	1.00	1.00
3	10.91	11.79	13.21	.59	.97	.79	1.00	1.00	1.00
4	10.71	11.66	12.41	.60	.75	.87	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.19	12.81	15.57	.95	1.27	1.12	1.00	1.00	1.00
2	10.77	12.26	13.77	.72	1.06	.79	1.00	1.00	1.00
3	10.75	11.64	13.12	.61	1.02	.82	1.00	1.00	1.00
4	10.54	11.51	12.30	.62	.78	.91	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.04	12.73	15.59	1.01	1.31	1.15	1.00	1.00	1.00
2	10.59	12.17	13.71	.78	1.09	.84	1.00	1.00	1.00
3	10.56	11.50	13.05	.66	1.06	.85	1.00	1.00	1.00
4	10.36	11.37	12.19	.70	.80	.93	1.00	1.00	1.00



TABLE D-2 (30 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.13	13.37	14.44	1.24	.85	.36	1.00	.90	.54
2	12.37	12.56	14.14	1.16	1.24	.71	1.00	1.00	.92
3	12.03	12.60	13.21	1.31	1.10	.85	1.00	1.00	1.00
4	12.11	12.17	13.19	1.24	1.24	.81	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.82	13.42	14.91	1.37	1.08	.72	1.00	1.00	1.00
2	12.10	12.31	14.13	1.29	1.37	.83	1.00	1.00	1.00
3	11.72	12.34	13.01	1.44	1.23	.91	1.00	1.00	1.00
4	11.81	11.86	13.00	1.37	1.38	.88	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.66	13.34	14.90	1.44	1.14	.73	1.00	1.00	1.00
2	11.95	12.18	14.09	1.34	1.43	.86	1.00	1.00	1.00
3	11.57	12.22	12.90	1.51	1.28	.95	1.00	1.00	1.00
4	11.64	11.71	12.90	1.45	1.45	.92	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.52	13.28	14.90	1.51	1.18	.75	1.00	1.00	1.00
2	11.82	12.06	14.04	1.41	1.50	.87	1.00	1.00	1.00
3	11.42	12.11	12.82	1.59	1.33	.97	1.00	1.00	1.00
4	11.51	11.57	12.81	1.52	1.51	.98	1.00	1.00	1.00

TABLE D-3 (30 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.75	6.37	.00	1.05	.88	.00	.98	.53	.00
2	5.52	6.59	7.41	.79	.78	.31	1.00	.76	.27
3	5.47	6.21	7.25	.69	.98	.43	1.00	.91	.46
4	5.29	6.20	6.76	.68	.87	.65	1.00	.99	.77

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.55	7.24	8.87	1.21	1.41	.30	1.00	.96	.10
2	5.24	6.92	8.21	.89	1.17	.71	1.00	.99	.84
3	5.19	6.21	7.86	.78	1.21	.78	1.00	1.00	.98
4	4.97	6.03	7.03	.76	.99	.96	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.45	7.29	9.69	1.28	1.50	.53	1.00	1.00	.47
2	5.12	6.89	8.42	.94	1.23	.83	1.00	1.00	1.00
3	5.04	6.13	7.87	.86	1.28	.82	1.00	1.00	1.00
4	4.85	5.94	6.98	.82	1.03	1.01	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.34	7.27	10.01	1.35	1.57	.62	1.00	1.00	.66
2	5.00	6.85	8.44	1.01	1.27	.86	1.00	1.00	1.00
3	4.93	6.06	7.87	.88	1.35	.85	1.00	1.00	1.00
4	4.72	5.87	6.96	.88	1.09	1.05	1.00	1.00	1.00

TABLE D-4 (30 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.84	7.02	.00	1.04	.61	.00	.78	.43	.00
2	6.14	6.18	7.43	.99	1.03	.40	.77	.70	.13
3	5.68	6.32	7.10	1.12	.82	.52	.79	.72	.57
4	5.81	5.86	7.07	1.03	1.05	.59	.78	.77	.56

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	6.19	7.66	8.75	1.61	1.00	.39	.98	.79	.40
2	6.49	6.71	8.49	1.49	1.56	.69	.98	.98	.71
3	6.03	6.81	7.64	1.69	1.38	.94	.98	.98	.98
4	6.15	6.23	7.61	1.60	1.61	.96	.98	.98	.98

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	6.17	8.06	9.28	1.71	1.24	.64	1.00	1.00	.79
2	6.47	6.70	8.78	1.58	1.65	.78	1.00	1.00	.96
3	5.99	6.80	7.67	1.79	1.46	.98	1.00	1.00	1.00
4	6.12	6.20	7.62	1.71	1.72	1.00	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	6.08	8.07	9.58	1.79	1.28	.80	1.00	1.00	.98
2	6.41	6.64	8.87	1.65	1.71	.86	1.00	1.00	.99
3	5.90	6.76	7.66	1.88	1.50	1.01	1.00	1.00	1.00
4	6.03	6.12	7.61	1.79	1.80	1.02	1.00	1.00	1.00

TABLE D-5 (45 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.28	13.31	14.14	.61	.89	.51	1.00	.99	.32
2	11.01	12.62	13.85	.41	.72	.68	1.00	1.00	.92
3	10.86	12.04	13.44	.34	.52	.64	1.00	1.00	1.00
4	10.78	11.76	12.78	.25	.40	.67	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.90	13.14	15.18	.67	.97	.91	1.00	1.00	.95
2	10.58	12.37	13.85	.45	.77	.81	1.00	1.00	1.00
3	10.42	11.75	13.25	.39	.56	.71	1.00	1.00	1.00
4	10.33	11.44	12.54	.27	.43	.72	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.69	13.05	15.26	.72	1.02	.97	1.00	1.00	1.00
2	10.35	12.26	13.80	.49	.82	.85	1.00	1.00	1.00
3	10.22	11.59	13.18	.41	.60	.73	1.00	1.00	1.00
4	10.07	11.27	12.43	.30	.45	.76	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.51	12.97	15.27	.75	1.06	1.01	1.00	1.00	1.00
2	10.16	12.15	13.75	.50	.85	.88	1.00	1.00	1.00
3	9.99	11.46	13.12	.43	.61	.75	1.00	1.00	1.00
4	9.87	11.12	12.33	.29	.48	.80	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.13	12.82	15.28	.82	1.14	1.13	1.00	1.00	1.00
2	9.75	11.92	13.63	.54	.93	.95	1.00	1.00	1.00
3	9.57	11.17	12.97	.48	.68	.83	1.00	1.00	1.00
4	9.43	10.80	12.13	.31	.52	.87	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.80	12.70	15.31	.89	1.23	1.19	1.00	1.00	1.00
2	9.37	11.74	13.58	.60	.99	1.01	1.00	1.00	1.00
3	9.15	10.92	12.86	.52	.73	.88	1.00	1.00	1.00
4	9.01	10.52	11.97	.33	.55	.92	1.00	1.00	1.00

TABLE D-6 (45 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.61	13.10	13.97	.74	.74	.59	1.00	.99	.84
2	11.48	12.41	13.65	.72	.63	.54	1.00	1.00	1.00
3	11.34	12.20	12.87	.74	.55	.59	1.00	1.00	1.00
4	11.26	11.96	12.63	.74	.56	.46	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.25	12.91	14.07	.83	.83	.79	1.00	1.00	1.00
2	11.11	12.12	13.49	.81	.68	.60	1.00	1.00	1.00
3	10.96	11.89	12.65	.82	.60	.63	1.00	1.00	1.00
4	10.87	11.62	12.35	.84	.63	.48	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.07	12.82	14.02	.88	.87	.83	1.00	1.00	1.00
2	10.93	11.97	13.42	.86	.73	.61	1.00	1.00	1.00
3	10.76	11.75	12.55	.87	.64	.66	1.00	1.00	1.00
4	10.66	11.47	12.24	.90	.67	.51	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.91	12.73	13.99	.92	.89	.85	1.00	1.00	1.00
2	10.75	11.88	13.36	.89	.75	.65	1.00	1.00	1.00
3	10.58	11.60	12.47	.91	.69	.70	1.00	1.00	1.00
4	10.47	11.33	12.15	.92	.69	.52	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.56	12.57	13.92	1.00	.97	.91	1.00	1.00	1.00
2	10.40	11.63	13.25	.99	.85	.67	1.00	1.00	1.00
3	10.22	11.34	12.26	1.01	.74	.75	1.00	1.00	1.00
4	10.10	11.02	11.92	1.03	.75	.61	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.26	12.42	13.86	1.11	1.03	.98	1.00	1.00	1.00
2	10.06	11.40	13.14	1.09	.88	.74	1.00	1.00	1.00
3	9.85	11.10	12.09	1.10	.78	.81	1.00	1.00	1.00
4	9.73	10.77	11.73	1.13	.82	.60	1.00	1.00	1.00

TABLE D-7 (45 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.30	6.95	.00	.76	.66	.00	1.00	.56	.00
2	5.06	6.80	7.31	.53	.61	.36	1.00	.81	.24
3	4.87	6.37	7.40	.44	.60	.42	1.00	1.00	.46
4	4.79	6.02	7.02	.36	.51	.53	1.00	1.00	.84

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.97	7.55	8.53	.86	1.06	.40	1.00	.96	.08
2	4.70	6.97	8.22	.61	.88	.78	1.00	1.00	.82
3	4.48	6.20	7.92	.49	.67	.70	1.00	1.00	.99
4	4.36	5.81	7.10	.38	.57	.72	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.82	7.60	9.60	.93	1.13	.56	1.00	1.00	.50
2	4.55	6.94	8.48	.67	.91	.92	1.00	1.00	.99
3	4.31	6.13	7.94	.54	.70	.73	1.00	1.00	1.00
4	4.19	5.72	7.07	.42	.60	.74	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.69	7.60	10.00	.98	1.17	.68	1.00	1.00	.76
2	4.39	6.91	8.52	.71	.96	.95	1.00	1.00	1.00
3	4.15	6.07	7.94	.57	.72	.76	1.00	1.00	1.00
4	4.01	5.64	7.06	.46	.62	.77	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.43	7.61	10.48	1.10	1.25	.86	1.00	1.00	.98
2	4.10	6.88	8.60	.79	1.01	1.02	1.00	1.00	1.00
3	3.83	5.95	7.98	.67	.79	.83	1.00	1.00	1.00
4	3.67	5.50	7.03	.51	.67	.81	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.20	7.65	10.68	1.23	1.32	.94	1.00	1.00	1.00
2	3.85	6.88	8.69	.91	1.09	1.07	1.00	1.00	1.00
3	3.55	5.90	8.07	.75	.83	.87	1.00	1.00	1.00
4	3.37	5.40	7.06	.61	.73	.89	1.00	1.00	1.00

TABLE D-8 (45 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.82	7.17	7.58	.94	.52	.24	1.00	.66	.18
2	5.65	6.79	7.58	.92	.73	.28	1.00	.99	.36
3	5.48	6.54	7.21	.95	.66	.58	1.00	1.00	.84
4	5.39	6.23	7.10	.96	.71	.49	1.00	1.00	.98

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.57	7.52	8.33	1.06	.83	.64	1.00	.96	.74
2	5.39	6.64	8.08	1.04	.78	.57	1.00	1.00	.93
3	5.20	6.37	7.27	1.08	.74	.68	1.00	1.00	1.00
4	5.08	6.04	7.02	1.10	.78	.54	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.43	7.58	8.69	1.12	.95	.87	1.00	1.00	.99
2	5.25	6.57	8.18	1.11	.81	.70	1.00	1.00	1.00
3	5.07	6.29	7.23	1.12	.74	.71	1.00	1.00	1.00
4	4.93	5.93	6.98	1.18	.80	.57	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.32	7.58	8.75	1.16	.97	.90	1.00	1.00	1.00
2	5.13	6.53	8.20	1.15	.85	.72	1.00	1.00	1.00
3	4.92	6.23	7.22	1.18	.77	.74	1.00	1.00	1.00
4	4.76	5.86	6.96	1.21	.84	.58	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.16	7.59	8.84	1.29	1.03	.94	1.00	1.00	1.00
2	4.93	6.48	8.26	1.27	.91	.76	1.00	1.00	1.00
3	4.70	6.14	7.22	1.31	.86	.79	1.00	1.00	1.00
4	4.52	5.77	6.93	1.34	.90	.61	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.01	7.64	8.96	1.44	1.10	.99	1.00	1.00	1.00
2	4.76	6.47	8.34	1.43	1.00	.80	1.00	1.00	1.00
3	4.50	6.10	7.25	1.46	.92	.84	1.00	1.00	1.00
4	4.31	5.70	6.95	1.51	1.00	.67	1.00	1.00	1.00

TABLE D-9 (60 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.33	13.22	14.44	.70	.77	.38	1.00	1.00	.62
2	11.11	12.48	13.88	.61	.68	.52	1.00	1.00	1.00
3	11.01	11.99	13.27	.59	.62	.56	1.00	1.00	1.00
4	10.93	11.71	12.70	.56	.62	.53	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.93	13.03	14.76	.77	.84	.65	1.00	1.00	1.00
2	10.70	12.21	13.74	.68	.75	.57	1.00	1.00	1.00
3	10.58	11.69	13.07	.65	.68	.62	1.00	1.00	1.00
4	10.50	11.35	12.47	.62	.69	.55	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.78	12.95	14.75	.79	.88	.67	1.00	1.00	1.00
2	10.53	12.11	13.69	.68	.77	.59	1.00	1.00	1.00
3	10.39	11.52	12.98	.67	.71	.63	1.00	1.00	1.00
4	10.33	11.21	12.37	.62	.70	.59	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.56	12.86	14.73	.85	.91	.70	1.00	1.00	1.00
2	10.29	11.97	13.63	.75	.81	.60	1.00	1.00	1.00
3	10.17	11.40	12.90	.72	.72	.65	1.00	1.00	1.00
4	10.07	11.03	12.24	.69	.75	.61	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.21	12.71	14.73	.93	.98	.73	1.00	1.00	1.00
2	9.90	11.75	13.54	.82	.88	.65	1.00	1.00	1.00
3	9.77	11.11	12.75	.78	.81	.71	1.00	1.00	1.00
4	9.65	10.74	12.05	.74	.81	.67	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.85	12.57	14.72	1.02	1.06	.80	1.00	1.00	1.00
2	9.53	11.53	13.46	.90	.95	.69	1.00	1.00	1.00
3	9.38	10.84	12.62	.86	.88	.76	1.00	1.00	1.00
4	9.26	10.43	11.86	.83	.89	.71	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.49	12.45	14.73	1.11	1.13	.85	1.00	1.00	1.00
2	9.15	11.32	13.40	.98	1.03	.73	1.00	1.00	1.00
3	8.98	10.60	12.51	.95	.96	.81	1.00	1.00	1.00
4	8.85	10.11	11.67	.90	.97	.76	1.00	1.00	1.00



TABLE D-10 (60 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.23	12.58	13.50	.52	.82	.93	1.00	1.00	.98
2	11.08	11.98	13.06	.50	.57	.83	1.00	1.00	1.00
3	11.00	11.72	12.52	.43	.56	.61	1.00	1.00	1.00
4	10.93	11.49	12.15	.43	.44	.57	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.82	12.35	13.39	.57	.88	1.04	1.00	1.00	1.00
2	10.67	11.68	12.87	.55	.61	.91	1.00	1.00	1.00
3	10.58	11.35	12.24	.48	.60	.70	1.00	1.00	1.00
4	10.49	11.13	11.88	.47	.47	.59	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.62	12.22	13.31	.60	.94	1.08	1.00	1.00	1.00
2	10.46	11.52	12.77	.59	.64	.95	1.00	1.00	1.00
3	10.38	11.19	12.13	.50	.65	.69	1.00	1.00	1.00
4	10.27	10.96	11.72	.50	.47	.66	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.44	12.10	13.24	.64	.96	1.12	1.00	1.00	1.00
2	10.26	11.38	12.69	.61	.66	.97	1.00	1.00	1.00
3	10.15	11.01	12.01	.53	.68	.72	1.00	1.00	1.00
4	10.06	10.80	11.57	.52	.51	.67	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.06	11.88	13.11	.70	1.06	1.21	1.00	1.00	1.00
2	9.86	11.09	12.50	.68	.73	1.07	1.00	1.00	1.00
3	9.74	10.70	11.79	.59	.74	.80	1.00	1.00	1.00
4	9.64	10.46	11.31	.58	.54	.76	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.67	11.66	13.00	.77	1.12	1.30	1.00	1.00	1.00
2	9.47	10.80	12.35	.74	.78	1.15	1.00	1.00	1.00
3	9.33	10.39	11.56	.64	.80	.88	1.00	1.00	1.00
4	9.22	10.11	11.06	.63	.60	.79	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.32	11.48	12.91	.86	1.21	1.39	1.00	1.00	1.00
2	9.08	10.57	12.22	.82	.85	1.23	1.00	1.00	1.00
3	8.95	10.09	11.40	.70	.88	.91	1.00	1.00	1.00
4	8.81	9.81	10.83	.69	.66	.85	1.00	1.00	1.00

TABLE D-11 (60 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.38	7.06	.00	.79	.56	.00	1.00	.54	.00
2	5.20	6.76	7.59	.77	.69	.23	1.00	.89	.21
3	5.05	6.34	7.37	.73	.74	.39	1.00	1.00	.60
4	4.98	5.96	7.04	.72	.73	.54	1.00	1.00	.90

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.10	7.66	8.93	.88	.93	.35	1.00	.99	.36
2	4.89	6.79	8.33	.87	.89	.56	1.00	1.00	.95
3	4.71	6.16	7.72	.82	.81	.65	1.00	1.00	1.00
4	4.63	5.75	7.06	.81	.81	.66	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.95	7.66	9.42	.93	.97	.50	1.00	1.00	.88
2	4.73	6.74	8.41	.93	.93	.62	1.00	1.00	1.00
3	4.55	6.08	7.72	.88	.85	.67	1.00	1.00	1.00
4	4.47	5.63	7.02	.86	.85	.68	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.81	7.66	9.60	1.00	1.01	.61	1.00	1.00	.99
2	4.57	6.71	8.44	1.00	.97	.63	1.00	1.00	1.00
3	4.39	6.00	7.72	.95	.90	.70	1.00	1.00	1.00
4	4.28	5.53	7.01	.94	.90	.71	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.58	7.67	9.76	1.13	1.09	.66	1.00	1.00	1.00
2	4.30	6.66	8.51	1.12	1.03	.67	1.00	1.00	1.00
3	4.09	5.90	7.73	1.07	.96	.74	1.00	1.00	1.00
4	3.97	5.40	6.97	1.07	.97	.77	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.38	7.73	9.92	1.25	1.15	.71	1.00	1.00	1.00
2	4.07	6.65	8.60	1.25	1.10	.69	1.00	1.00	1.00
3	3.81	5.82	7.78	1.20	1.06	.77	1.00	1.00	1.00
4	3.70	5.28	6.98	1.20	1.07	.81	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.22	7.81	10.08	1.38	1.21	.73	1.00	1.00	1.00
2	3.87	6.67	8.73	1.38	1.16	.72	1.00	1.00	1.00
3	3.60	5.81	7.88	1.34	1.12	.81	1.00	1.00	1.00
4	3.45	5.22	7.03	1.34	1.14	.86	1.00	1.00	1.00

TABLE D-12 (60 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.32	6.65	7.03	.68	.67	.60	1.00	.80	.42
2	5.15	6.29	6.97	.63	.68	.62	1.00	1.00	.60
3	5.04	5.93	6.83	.57	.67	.65	1.00	1.00	.92
4	4.94	5.71	6.48	.57	.55	.67	1.00	1.00	.98

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.05	6.87	7.83	.78	.99	1.04	1.00	.98	.89
2	4.82	6.15	7.44	.72	.72	.97	1.00	1.00	.98
3	4.71	5.74	6.80	.65	.71	.77	1.00	1.00	1.00
4	4.60	5.49	6.40	.67	.61	.73	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.90	6.86	8.00	.82	1.09	1.14	1.00	1.00	1.00
2	4.67	6.06	7.45	.75	.78	1.04	1.00	1.00	1.00
3	4.53	5.60	6.77	.69	.79	.78	1.00	1.00	1.00
4	4.43	5.36	6.31	.69	.65	.79	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.76	6.83	8.01	.87	1.12	1.16	1.00	1.00	1.00
2	4.52	5.99	7.45	.81	.80	1.06	1.00	1.00	1.00
3	4.39	5.52	6.74	.74	.81	.81	1.00	1.00	1.00
4	4.25	5.25	6.25	.76	.68	.82	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.51	6.78	8.04	.98	1.21	1.24	1.00	1.00	1.00
2	4.23	5.87	7.45	.92	.86	1.15	1.00	1.00	1.00
3	4.08	5.40	6.67	.84	.88	.91	1.00	1.00	1.00
4	3.92	5.08	6.16	.85	.73	.87	1.00	1.00	1.00

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.32	6.79	8.13	1.12	1.28	1.31	1.00	1.00	1.00
2	4.00	5.81	7.49	1.04	.92	1.22	1.00	1.00	1.00
3	3.84	5.27	6.66	.98	.96	.96	1.00	1.00	1.00
4	3.66	4.95	6.13	.99	.82	.93	1.00	1.00	1.00

TABLE D-12 (60 DEG, 90 DEG, 3 HRS) (continued)

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.14	6.80	8.22	1.23	1.36	1.38	1.00	1.00	1.00
2	3.81	5.77	7.55	1.15	1.00	1.27	1.00	1.00	1.00
3	3.63	5.20	6.69	1.09	1.03	1.01	1.00	1.00	1.00
4	3.42	4.85	6.11	1.10	.88	1.00	1.00	1.00	1.00

TABLE D-13 (75 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.91	13.02	13.79	.89	.96	.70	1.00	1.00	.84
2	11.80	12.55	13.47	.88	.92	.87	1.00	1.00	1.00
3	11.74	12.30	13.04	.89	.88	.90	1.00	1.00	1.00
4	11.71	12.11	12.70	.88	.89	.88	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.58	12.82	13.90	.99	1.05	.91	1.00	1.00	1.00
2	11.46	12.30	13.31	.97	1.03	.93	1.00	1.00	1.00
3	11.40	12.00	12.82	.97	.99	.99	1.00	1.00	1.00
4	11.35	11.80	12.46	.97	.99	.97	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.45	12.72	13.85	1.02	1.09	.94	1.00	1.00	1.00
2	11.32	12.18	13.23	.99	1.06	.97	1.00	1.00	1.00
3	11.26	11.86	12.73	1.00	1.04	1.01	1.00	1.00	1.00
4	11.23	11.67	12.34	.98	1.03	1.01	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.28	12.62	13.80	1.09	1.14	.98	1.00	1.00	1.00
2	11.14	12.06	13.15	1.07	1.11	1.02	1.00	1.00	1.00
3	11.09	11.72	12.63	1.06	1.09	1.06	1.00	1.00	1.00
4	11.04	11.51	12.25	1.07	1.10	1.04	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.00	12.45	13.72	1.17	1.23	1.05	1.00	1.00	1.00
2	10.85	11.84	13.03	1.15	1.19	1.09	1.00	1.00	1.00
3	10.77	11.47	12.46	1.15	1.18	1.15	1.00	1.00	1.00
4	10.74	11.25	12.02	1.14	1.18	1.14	1.00	1.00	1.00

TABLE D-13 (75 DEG, 60 DEG, 6 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.72	12.28	13.65	1.27	1.33	1.12	1.00	1.00	1.00
2	10.56	11.62	12.91	1.25	1.30	1.17	1.00	1.00	1.00
3	10.47	11.23	12.30	1.25	1.27	1.24	1.00	1.00	1.00
4	10.43	11.00	11.83	1.23	1.27	1.24	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.44	12.16	13.60	1.38	1.41	1.21	1.00	1.00	1.00
2	10.27	11.44	12.82	1.36	1.40	1.23	1.00	1.00	1.00
3	10.19	11.00	12.17	1.35	1.38	1.33	1.00	1.00	1.00
4	10.14	10.74	11.67	1.34	1.40	1.30	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.31	12.09	13.58	1.43	1.47	1.24	1.00	1.00	1.00
2	10.13	11.35	12.77	1.41	1.45	1.29	1.00	1.00	1.00
3	10.04	10.91	12.10	1.42	1.42	1.37	1.00	1.00	1.00
4	9.99	10.62	11.59	1.40	1.43	1.37	1.00	1.00	1.00

TABLE D-14 (75 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.34	12.15	12.82	.88	1.16	1.33	1.00	1.00	1.00
2	11.27	11.79	12.47	.86	1.01	1.25	1.00	1.00	1.00
3	11.22	11.62	12.13	.84	.95	1.11	1.00	1.00	1.00
4	11.18	11.52	11.89	.83	.89	1.06	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.95	11.84	12.59	.98	1.28	1.45	1.00	1.00	1.00
2	10.88	11.44	12.20	.94	1.12	1.37	1.00	1.00	1.00
3	10.82	11.24	11.82	.93	1.07	1.23	1.00	1.00	1.00
4	10.77	11.14	11.54	.91	.99	1.16	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.75	11.71	12.49	1.04	1.32	1.52	1.00	1.00	1.00
2	10.65	11.28	12.10	1.02	1.17	1.41	1.00	1.00	1.00
3	10.61	11.05	11.71	.97	1.15	1.26	1.00	1.00	1.00
4	10.57	10.91	11.40	.95	1.07	1.21	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.57	11.54	12.37	1.08	1.41	1.59	1.00	1.00	1.00
2	10.49	11.11	11.95	1.05	1.24	1.50	1.00	1.00	1.00
3	10.43	10.88	11.54	1.03	1.19	1.36	1.00	1.00	1.00
4	10.37	10.76	11.23	1.01	1.08	1.30	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.19	11.26	12.17	1.19	1.53	1.72	1.00	1.00	1.00
2	10.10	10.78	11.71	1.15	1.37	1.62	1.00	1.00	1.00
3	10.04	10.53	11.25	1.13	1.31	1.47	1.00	1.00	1.00
4	9.98	10.40	10.91	1.11	1.22	1.42	1.00	1.00	1.00

TABLE D-14 (75 DEG, 90 DEG, 6 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.83	11.00	11.98	1.31	1.67	1.85	1.00	1.00	1.00
2	9.72	10.48	11.48	1.26	1.50	1.75	1.00	1.00	1.00
3	9.67	10.20	11.00	1.23	1.44	1.59	1.00	1.00	1.00
4	9.59	10.05	10.62	1.21	1.35	1.55	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.47	10.76	11.80	1.43	1.79	1.99	1.00	1.00	1.00
2	9.36	10.19	11.28	1.38	1.61	1.88	1.00	1.00	1.00
3	9.29	9.88	10.77	1.34	1.58	1.70	1.00	1.00	1.00
4	9.22	9.72	10.34	1.33	1.46	1.67	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	9.31	10.64	11.71	1.49	1.86	2.08	1.00	1.00	1.00
2	9.16	10.07	11.17	1.47	1.66	1.98	1.00	1.00	1.00
3	9.09	9.76	10.63	1.42	1.61	1.80	1.00	1.00	1.00
4	9.03	9.57	10.23	1.38	1.52	1.74	1.00	1.00	1.00



TABLE D-15 (75 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	6.00	6.76	7.57	.89	.66	.24	.93	.58	.32
2	5.93	6.49	7.14	.94	.72	.42	.94	.75	.48
3	5.89	6.31	6.82	.95	.79	.53	.95	.82	.61
4	5.86	6.16	6.59	.98	.83	.63	.96	.87	.69

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.96	7.41	8.12	1.12	1.15	.67	1.00	.97	.71
2	5.85	6.83	7.86	1.17	1.14	.93	1.00	1.00	.94
3	5.77	6.48	7.43	1.16	1.14	1.04	1.00	1.00	.99
4	5.74	6.25	7.03	1.17	1.12	1.10	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.86	7.44	8.57	1.18	1.23	.94	1.00	1.00	.99
2	5.75	6.78	7.94	1.22	1.20	1.00	1.00	1.00	1.00
3	5.67	6.41	7.41	1.21	1.19	1.09	1.00	1.00	1.00
4	5.62	6.18	6.99	1.23	1.18	1.15	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.78	7.43	8.61	1.21	1.27	.97	1.00	1.00	1.00
2	5.66	6.74	7.95	1.27	1.25	1.03	1.00	1.00	1.00
3	5.58	6.37	7.40	1.27	1.23	1.12	1.00	1.00	1.00
4	5.54	6.10	6.96	1.26	1.24	1.19	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.64	7.44	8.68	1.33	1.35	1.03	1.00	1.00	1.00
2	5.51	6.70	7.99	1.39	1.31	1.10	1.00	1.00	1.00
3	5.41	6.29	7.38	1.38	1.34	1.20	1.00	1.00	1.00
4	5.36	6.01	6.94	1.41	1.32	1.25	1.00	1.00	1.00

TABLE D-15 (75 DEG, 60 DEG, 3 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.55	7.48	8.81	1.42	1.43	1.07	1.00	1.00	1.00
2	5.40	6.70	8.06	1.50	1.41	1.16	1.00	1.00	1.00
3	5.29	6.24	7.42	1.50	1.44	1.29	1.00	1.00	1.00
4	5.25	5.94	6.96	1.51	1.43	1.33	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.49	7.52	8.93	1.54	1.50	1.12	1.00	1.00	1.00
2	5.34	6.72	8.14	1.62	1.50	1.20	1.00	1.00	1.00
3	5.24	6.23	7.48	1.62	1.53	1.35	1.00	1.00	1.00
4	5.17	5.91	6.99	1.62	1.53	1.40	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.48	7.58	9.00	1.58	1.54	1.15	1.00	1.00	1.00
2	5.32	6.74	8.21	1.66	1.53	1.25	1.00	1.00	1.00
3	5.22	6.25	7.53	1.66	1.57	1.38	1.00	1.00	1.00
4	5.15	5.92	7.02	1.67	1.58	1.43	1.00	1.00	1.00

TABLE D-16 (75 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.44	5.92	6.15	1.11	1.01	.95	.99	.79	.59
2	5.32	5.82	6.04	1.08	1.06	.98	1.00	.90	.68
3	5.29	5.67	5.94	1.07	1.08	1.02	1.00	.95	.78
4	5.23	5.65	5.82	1.06	1.10	1.04	1.00	.99	.86

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.15	6.23	7.05	1.27	1.52	1.61	1.00	.99	.98
2	5.02	5.79	6.66	1.24	1.38	1.56	1.00	1.00	1.00
3	4.96	5.51	6.24	1.22	1.34	1.46	1.00	1.00	1.00
4	4.91	5.39	5.90	1.21	1.28	1.42	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.01	6.19	7.05	1.35	1.58	1.70	1.00	1.00	1.00
2	4.89	5.70	6.62	1.30	1.45	1.63	1.00	1.00	1.00
3	4.82	5.40	6.18	1.27	1.41	1.52	1.00	1.00	1.00
4	4.76	5.25	5.84	1.27	1.37	1.45	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.87	6.10	7.01	1.44	1.68	1.76	1.00	1.00	1.00
2	4.73	5.57	6.56	1.39	1.54	1.70	1.00	1.00	1.00
3	4.64	5.27	6.10	1.35	1.48	1.61	1.00	1.00	1.00
4	4.59	5.14	5.70	1.36	1.44	1.58	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.60	5.99	6.97	1.59	1.81	1.89	1.00	1.00	1.00
2	4.46	5.42	6.47	1.53	1.68	1.85	1.00	1.00	1.00
3	4.40	5.06	6.00	1.52	1.63	1.72	1.00	1.00	1.00
4	4.31	4.90	5.59	1.51	1.60	1.69	1.00	1.00	1.00

TABLE D-16 (75 DEG, 90 DEG, 3 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.40	5.89	6.97	1.75	1.95	2.04	1.00	1.00	1.00
2	4.22	5.28	6.43	1.71	1.82	1.98	1.00	1.00	1.00
3	4.16	4.90	5.89	1.68	1.78	1.88	1.00	1.00	1.00
4	4.06	4.74	5.44	1.69	1.74	1.83	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.22	5.87	6.99	1.90	2.10	2.15	1.00	1.00	1.00
2	4.03	5.20	6.43	1.87	1.95	2.11	1.00	1.00	1.00
3	3.95	4.78	5.87	1.84	1.94	1.98	1.00	1.00	1.00
4	3.86	4.59	5.38	1.85	1.87	2.00	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	4.22	5.87	6.99	1.90	2.10	2.15	1.00	1.00	1.00
2	3.95	5.17	6.44	1.95	2.02	2.16	1.00	1.00	1.00
3	3.86	4.74	5.86	1.94	2.00	2.07	1.00	1.00	1.00
4	3.76	4.56	5.35	1.94	1.93	2.05	1.00	1.00	1.00

TABLE D-17 (90 DEG, 60 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.87	12.87	12.87	1.01	1.01	1.01	.98	.98	.98
2	12.87	12.87	12.87	1.01	1.01	1.01	.98	.98	.98
3	12.87	12.87	12.87	1.01	1.01	1.01	.98	.98	.98
4	12.87	12.87	12.87	1.01	1.01	1.01	.98	.98	.98

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.72	12.72	12.72	1.19	1.19	1.19	1.00	1.00	1.00
2	12.72	12.72	12.72	1.19	1.19	1.19	1.00	1.00	1.00
3	12.72	12.72	12.72	1.19	1.19	1.19	1.00	1.00	1.00
4	12.72	12.72	12.72	1.19	1.19	1.19	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.63	12.63	12.63	1.22	1.22	1.22	1.00	1.00	1.00
2	12.63	12.63	12.63	1.22	1.22	1.22	1.00	1.00	1.00
3	12.63	12.63	12.63	1.22	1.22	1.22	1.00	1.00	1.00
4	12.63	12.63	12.63	1.22	1.22	1.22	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.54	12.54	12.54	1.24	1.24	1.24	1.00	1.00	1.00
2	12.54	12.54	12.54	1.24	1.24	1.24	1.00	1.00	1.00
3	12.54	12.54	12.54	1.24	1.24	1.24	1.00	1.00	1.00
4	12.54	12.54	12.54	1.24	1.24	1.24	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.34	12.34	12.34	1.38	1.38	1.38	1.00	1.00	1.00
2	12.34	12.34	12.34	1.38	1.38	1.38	1.00	1.00	1.00
3	12.34	12.34	12.34	1.38	1.38	1.38	1.00	1.00	1.00
4	12.34	12.34	12.34	1.38	1.38	1.38	1.00	1.00	1.00

TABLE D-17 (90 DEG, 60 DEG, 6 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.16	12.16	12.16	1.49	1.49	1.49	1.00	1.00	1.00
2	12.16	12.16	12.16	1.49	1.49	1.49	1.00	1.00	1.00
3	12.16	12.16	12.16	1.49	1.49	1.49	1.00	1.00	1.00
4	12.16	12.16	12.16	1.49	1.49	1.49	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	12.01	12.01	12.01	1.57	1.57	1.57	1.00	1.00	1.00
2	12.01	12.01	12.01	1.57	1.57	1.57	1.00	1.00	1.00
3	12.01	12.01	12.01	1.57	1.57	1.57	1.00	1.00	1.00
4	12.01	12.01	12.01	1.57	1.57	1.57	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.94	11.94	11.94	1.64	1.64	1.64	1.00	1.00	1.00
2	11.94	11.94	11.94	1.64	1.64	1.64	1.00	1.00	1.00
3	11.94	11.94	11.94	1.64	1.64	1.64	1.00	1.00	1.00
4	11.94	11.94	11.94	1.64	1.64	1.64	1.00	1.00	1.00

TABLE D-18 (90 DEG, 90 DEG, 6 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.97	11.97	11.97	1.33	1.33	1.33	1.00	1.00	1.00
2	11.97	11.97	11.97	1.33	1.33	1.33	1.00	1.00	1.00
3	11.97	11.97	11.97	1.33	1.33	1.33	1.00	1.00	1.00
4	12.08	12.08	12.08	1.35	1.35	1.35	1.00	1.00	1.00

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.65	11.65	11.65	1.47	1.47	1.47	1.00	1.00	1.00
2	11.65	11.65	11.65	1.47	1.47	1.47	1.00	1.00	1.00
3	11.65	11.65	11.65	1.47	1.47	1.47	1.00	1.00	1.00
4	11.65	11.65	11.65	1.47	1.47	1.47	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.50	11.50	11.50	1.52	1.52	1.52	1.00	1.00	1.00
2	11.50	11.50	11.50	1.52	1.52	1.52	1.00	1.00	1.00
3	11.50	11.50	11.50	1.52	1.52	1.52	1.00	1.00	1.00
4	11.50	11.50	11.50	1.52	1.52	1.52	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.34	11.34	11.34	1.61	1.61	1.61	1.00	1.00	1.00
2	11.34	11.34	11.34	1.61	1.61	1.61	1.00	1.00	1.00
3	11.34	11.34	11.34	1.61	1.61	1.61	1.00	1.00	1.00
4	11.34	11.34	11.34	1.61	1.61	1.61	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	11.03	11.03	11.03	1.76	1.76	1.76	1.00	1.00	1.00
2	11.03	11.03	11.03	1.76	1.76	1.76	1.00	1.00	1.00
3	11.03	11.03	11.03	1.76	1.76	1.76	1.00	1.00	1.00
4	11.03	11.03	11.03	1.76	1.76	1.76	1.00	1.00	1.00

TABLE D-18 (90 DEG, 90 DEG, 6 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.74	10.74	10.74	1.91	1.91	1.91	1.00	1.00	1.00
2	10.74	10.74	10.74	1.91	1.91	1.91	1.00	1.00	1.00
3	10.74	10.74	10.74	1.91	1.91	1.91	1.00	1.00	1.00
4	10.74	10.74	10.74	1.91	1.91	1.91	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.47	10.47	10.47	2.07	2.07	2.07	1.00	1.00	1.00
2	10.47	10.47	10.47	2.07	2.07	2.07	1.00	1.00	1.00
3	10.47	10.47	10.47	2.07	2.07	2.07	1.00	1.00	1.00
4	10.47	10.47	10.47	2.07	2.07	2.07	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	10.33	10.33	10.33	2.15	2.15	2.15	1.00	1.00	1.00
2	10.33	10.33	10.33	2.15	2.15	2.15	1.00	1.00	1.00
3	10.33	10.33	10.33	2.15	2.15	2.15	1.00	1.00	1.00
4	10.33	10.33	10.33	2.15	2.15	2.15	1.00	1.00	1.00



TABLE D-19 (90 DEG, 60 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	6.65	6.65	6.65	.60	.60	.60	.65	.65	.65
2	6.65	6.65	6.65	.60	.60	.60	.65	.65	.65
3	6.65	6.65	6.65	.60	.60	.60	.65	.65	.65
4	6.65	6.65	6.65	.60	.60	.60	.65	.65	.65

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.10	7.10	7.10	1.13	1.13	1.13	.92	.92	.92
2	7.10	7.10	7.10	1.13	1.13	1.13	.92	.92	.92
3	7.10	7.10	7.10	1.13	1.13	1.13	.92	.92	.92
4	7.10	7.10	7.10	1.13	1.13	1.13	.92	.92	.92

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.27	7.27	7.27	1.31	1.31	1.31	1.00	1.00	1.00
2	7.27	7.27	7.27	1.31	1.31	1.31	1.00	1.00	1.00
3	7.27	7.27	7.27	1.31	1.31	1.31	1.00	1.00	1.00
4	7.27	7.27	7.27	1.31	1.31	1.31	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.28	7.28	7.28	1.34	1.34	1.34	1.00	1.00	1.00
2	7.28	7.28	7.28	1.34	1.34	1.34	1.00	1.00	1.00
3	7.28	7.28	7.28	1.34	1.34	1.34	1.00	1.00	1.00
4	7.28	7.28	7.28	1.34	1.34	1.34	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.22	7.22	7.22	1.45	1.45	1.45	1.00	1.00	1.00
2	7.22	7.22	7.22	1.45	1.45	1.45	1.00	1.00	1.00
3	7.22	7.22	7.22	1.45	1.45	1.45	1.00	1.00	1.00
4	7.22	7.22	7.22	1.45	1.45	1.45	1.00	1.00	1.00

TABLE D-19 (90 DEG, 60 DEG, 3 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.23	7.23	7.23	1.58	1.58	1.58	1.00	1.00	1.00
2	7.23	7.23	7.23	1.58	1.58	1.58	1.00	1.00	1.00
3	7.23	7.23	7.23	1.58	1.58	1.58	1.00	1.00	1.00
4	7.23	7.23	7.23	1.58	1.58	1.58	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.28	7.28	7.28	1.61	1.61	1.61	1.00	1.00	1.00
2	7.28	7.28	7.28	1.61	1.61	1.61	1.00	1.00	1.00
3	7.28	7.28	7.28	1.61	1.61	1.61	1.00	1.00	1.00
4	7.28	7.28	7.28	1.61	1.61	1.61	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	7.38	7.38	7.38	1.66	1.66	1.66	1.00	1.00	1.00
2	7.38	7.38	7.38	1.66	1.66	1.66	1.00	1.00	1.00
3	7.38	7.38	7.38	1.66	1.66	1.66	1.00	1.00	1.00
4	7.38	7.38	7.38	1.66	1.66	1.66	1.00	1.00	1.00

TABLE D-20 (90 DEG, 90 DEG, 3 HRS)

## 0 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.66	5.66	5.66	1.18	1.18	1.18	.82	.82	.82
2	5.66	5.66	5.66	1.18	1.18	1.18	.82	.82	.82
3	5.66	5.66	5.66	1.18	1.18	1.18	.82	.82	.82
4	5.66	5.66	5.66	1.18	1.18	1.18	.82	.82	.82

## 500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.98	5.98	5.98	1.78	1.78	1.78	1.00	1.00	1.00
2	5.98	5.98	5.98	1.78	1.78	1.78	1.00	1.00	1.00
3	5.98	5.98	5.98	1.78	1.78	1.78	1.00	1.00	1.00
4	5.98	5.98	5.98	1.78	1.78	1.78	1.00	1.00	1.00

## 750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.88	5.88	5.88	1.86	1.86	1.86	1.00	1.00	1.00
2	5.88	5.88	5.88	1.86	1.86	1.86	1.00	1.00	1.00
3	5.88	5.88	5.88	1.86	1.86	1.86	1.00	1.00	1.00
4	5.88	5.88	5.88	1.86	1.86	1.86	1.00	1.00	1.00

## 1000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.80	5.80	5.80	1.95	1.95	1.95	1.00	1.00	1.00
2	5.80	5.80	5.80	1.95	1.95	1.95	1.00	1.00	1.00
3	5.80	5.80	5.80	1.95	1.95	1.95	1.00	1.00	1.00
4	5.80	5.80	5.80	1.95	1.95	1.95	1.00	1.00	1.00

## 1500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.58	5.58	5.58	2.16	2.16	2.16	1.00	1.00	1.00
2	5.58	5.58	5.58	2.16	2.16	2.16	1.00	1.00	1.00
3	5.58	5.58	5.58	2.16	2.16	2.16	1.00	1.00	1.00
4	5.58	5.58	5.58	2.16	2.16	2.16	1.00	1.00	1.00

TABLE D-20 (90 DEG, 90 DEG, 3 HRS) (continued)

## 2000 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.47	5.47	5.47	2.35	2.35	2.35	1.00	1.00	1.00
2	5.47	5.47	5.47	2.35	2.35	2.35	1.00	1.00	1.00
3	5.47	5.47	5.47	2.35	2.35	2.35	1.00	1.00	1.00
4	5.47	5.47	5.47	2.35	2.35	2.35	1.00	1.00	1.00

## 2500 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.37	5.37	5.37	2.55	2.55	2.55	1.00	1.00	1.00
2	5.37	5.37	5.37	2.55	2.55	2.55	1.00	1.00	1.00
3	5.37	5.37	5.37	2.55	2.55	2.55	1.00	1.00	1.00
4	5.37	5.37	5.37	2.55	2.55	2.55	1.00	1.00	1.00

## 2750 KILOMETERS

CONST	E(DIST)			SIG(DIST)			PROB(EVENT)		
	1ST	2ND	3RD	1ST	2ND	3RD	1ST	2ND	3RD
1	5.34	5.34	5.34	2.63	2.63	2.63	1.00	1.00	1.00
2	5.34	5.34	5.34	2.63	2.63	2.63	1.00	1.00	1.00
3	5.34	5.34	5.34	2.63	2.63	2.63	1.00	1.00	1.00
4	5.34	5.34	5.34	2.63	2.63	2.63	1.00	1.00	1.00